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THE POSTURE OF SCHOOL CHILDREN IN RELATION TO NUTRITION, PHYSICAL DEFECTS, SCHOOL GRADE, AND PHYSICAL TRAINING.

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The importance of posture from the standpoint of health has been quite generally recognized since the brilliant exposition of the subject by Goldthwait more than a decade ago. Parents have always been interested in the child's posture from the esthetic point of view, but it is realized that the matter has a far deeper significance than that which relates merely to personal appearance. The positive health value of good posture—to say nothing of its mental effect—is conceded to be great enough to demand careful scientific investigation as to the underlying causes of good and bad posture and their relation to the ordinary conditions of childhood.

The exponents of some of the popular health movements are each prone to consider his particular activity as a panacea for all the bad posture in the world. This is particularly true of a certain type of nutrition worker, or play enthusiast, or specialist in corrective gymnastics. It was felt, however, that to obtain any data of value on the subject of posture it would be necessary to take cognizance not only of those matters but to consider also the hygiene of school life and instruction and the prevalence of common physical defects in childhood.

The present study was made in three elementary schools at Bedford, Ind., comprising children in the first six grades. The number of sixth-grade children is small, owing to the fact that this grade was taught in only one of these schools. The age, sex, grade, nutrition, physical defects, and posture were noted in the case of practically every child in the group studied.

NUTRITION AND POSTURE.

In estimating the nutrition of these children, those who were less than 7 per cent under the existing standards of weight for a given age and height were considered to be well nourished, and were marked "Good." Those 7 per cent or more below these standards were marked "Poor." Those who were underweight at the first

weighing but came up to the accepted standard before the close of the school year, and those having "Good" nutrition at the first weighing but sinking to or below the 7 per cent level during the year, were together given an intermediate rating as "Fair." Posture was rated as "Good," "Fair," or "Poor," according to the points usually considered—position of head and shoulders, antero-posterior curves of the spine, flexion of knees, etc.

TABLE I.—*Nutrition and posture rating of 1,115 children in three elementary schools.*

Rating.	Nutrition.		Posture. Per cent.
	Per cent.	Per cent.	
Good.....	58	29	
Fair.....	23	40	
Poor.....	19	31	

Of a total of 1,115 children who were given a rating for posture, 321, or 29 per cent, were classified as good; 442, or 40 per cent, as fair; and 352, or 31 per cent, as poor. Thus it will be seen that the number of children having good posture was slightly less than that of the children having poor posture.

TABLE II.—*Correlation of posture and nutrition.*

Good posture:	Per cent.	Poor posture:	Per cent.
Good nutrition.....	63	Good nutrition.....	54
Poor nutrition.....	14	Poor nutrition.....	23
Good nutrition:		Poor nutrition:	
Good posture.....	31	Good posture.....	22
Poor posture.....	30	Poor posture.....	39

According to those who believe that nutrition is the controlling factor in posture, one would expect to find a majority of these 1,115 children undernourished. On the contrary, 58 per cent of the number never fell to the 7 per cent line during the whole school year, whereas only 19 per cent were at or below this level during the same period. The number of well-nourished children was twice as great as the number of children with good posture. With three times as many well-nourished children as undernourished, the number having good posture, instead of being three times as great, was slightly less than the number having poor posture. Of the 645 children well nourished throughout the year, 31 per cent had good posture and 30 per cent had poor posture. So that a child with good nutrition has a slightly more than even chance of having good posture. If the child's nutrition is poor, his chances of having good posture are less, 22 per cent of the 212 children underweight throughout the year having good posture and 39 per cent having poor posture.

Of those children who reach the good-posture grade, the well-nourished constitute 63 per cent of the total number. It is to be

noted, however, that 14 per cent of these good-posture children were underweight throughout the year, so that it is quite possible for an underweight child to have good posture. On the other hand, among the children with poor posture, almost twice as many were well nourished as were undernourished—54 per cent to 23 per cent.

On the whole, it seems evident that while good nutrition is a contributory factor to good posture, it is almost as likely to be found with poor posture. Poor nutrition is less likely to be found with good posture than is good nutrition with poor posture.

PHYSICAL DEFECTS AND POSTURE.

An investigation of the relation of physical defects to posture brought out some interesting facts.

TABLE III.—*Correlation of physical defects with posture.*

Defect.	Number of children.	Posture.	
		Good.	Poor.
Teeth alone.....	430	34	23
Eyes alone and with teeth.....	126	26	37
Adenoids alone and with teeth.....	35	14	43
Tonsils alone and with teeth.....	114	26	36
Adenoids alone or with eyes, teeth, or both.....	39	15	41
Tonsils alone or with eyes or teeth or both.....	157	25	39
Adenoids and tonsils alone or with eyes or teeth or both.....	188	23	43
Adenoids or tonsils or both, alone, or with eyes, teeth, or both.....	384	23	41

Defective teeth, which have been blamed for most of the ills which flesh is heir to, apparently can be given a comparatively clean bill of health in the case of posture. Of 430 children having this defect alone, 34 per cent had good posture and 23 per cent had poor posture. Since the number having good posture is almost one and one-half times as great as those with poor posture, defective teeth can not be considered a factor of importance in the production of poor posture.

The number of children having eye defects alone (37) is too small to furnish any conclusive evidence as to the effect of this defect on posture. When, however, to this number is added those having a combination of eye and teeth defects, and eliminating the latter as unimportant, the figures show 37 per cent with poor posture as against 26 per cent with good posture. Hence, eye defects must be taken into consideration in studying the question of the posture of school children. This evidence supports the opinions long held by orthopedists.

Defects of the nose and throat seem to have an important effect on the posture of the child. Of 384 children having adenoids or enlarged or diseased tonsils, or both, either alone or in combination

with eyes, or teeth, or both, 41 per cent had poor posture and only 23 per cent had good posture. Of 306 children in whom were found a combination of poor posture and physical defects, 52 per cent had adenoids, enlarged or diseased tonsils, or a combination of these defects.

It is interesting to note that of those children showing poor posture not accompanied by physical defects the well nourished throughout the year were twice as numerous as the ill nourished throughout the year, and also twice as many as those underweight at the beginning of the year but who came up to the accepted standards before the close of school. This is another bit of evidence that poor posture is by no means pathognomonic of poor nutrition.

SCHOOL LIFE AND POSTURE.

In order to inquire into the relation of school conditions to the posture of the pupils, a study was made of posture in the various grades. It seems scarcely fair to include the sixth grade, because of the small number of children of that grade included in the study, and hence it is omitted in the grade studies. It will be seen from the accompanying table that the general direction of the good posture curve is downward from the first grade, and that of the poor posture curve is upward.

TABLE IV.—*Posture by grades.*

Grade.	Number of pupils.	Posture.		
		Good.	Fair.	Poor.
1.....	358	34	40	26
2.....	197	29	45	26
3.....	195	28	37	35
4.....	201	24	38	38
5.....	125	29	33	38

The difference between the highest and lowest good posture ratings is 10 per cent, whereas the difference between the highest and lowest poor posture rating is 12 per cent. The fall in good posture is seen to be slightly less than the rise in poor posture. These figures are encouraging, because, with adequate health supervision, physical training, and good hygienic conditions, it ought not to be difficult to convert a 12 per cent deficit into a good posture surplus. The school system studied, while having many excellent features, did not have an adequate system of physical training for its elementary schools, and the pupils at that time had not been furnished with adjustable seats and desks.

SCHOOL GRADE AND NUTRITION.

In order to discover whether the increase in poor posture and the decrease in good posture in the higher grades was accompanied by an increase in malnutrition in those grades, a grade-nutrition study was made. It would be manifestly unfair in a school-grade-nutrition study to use the results of the first fall weighing as a basis for the calculation of the malnutrition for that grade. The child's weight when he enters school in the fall is largely influenced by his manner of life during the long summer vacation, when he is not directly under the school's influence. In view of this fact, the age weight-height index was obtained from the spring weighing.

TABLE V.—*Percentage of underweight pupils by grade.*

	Per cent.
Grade 1.....	23
Grade 2.....	17
Grade 3.....	19
Grade 4.....	21
Grade 5.....	23

It will be seen from the table that there was a rather sharp fall in the amount of underweight from the first to the second grade, and then a gradual rise until the percentage of underweight pupils in the fifth grade was exactly the same as that in the first grade. The difference between the amount of malnutrition in the second grade and the fifth grade was 6 per cent. Again it is seen that the correlation between nutrition and posture is not a perfect one.

POSTURE AND PHYSICAL EXERCISE.

Unfortunately the school system studied furnished no real test of the effect of various forms of physical exercise. No trained teacher of physical education was connected with the elementary schools. The pupils were supposed to engage in supervised play during recess, but there was no supervision other than that of the regular class teacher. Without training in games and the supervision of play activities, her presence on the playground in most cases had no practical value, as far as real playground work was concerned. Occasionally a teacher's enthusiasm helped to make up for her lack of training, but this was the exception rather than the rule.

In two of the schools (L. and S.), in addition to this more or less desultory play, the teacher taught the pupils some free standing gymnastics. In L. school these were conducted to music, in generally poor form, in a hall in the center of the building, without adequate ventilation. At S. school rather vigorous, snappy, free-standing exercises were given without music, frequently in the open air when the weather permitted.

A comparative study of posture in these three schools will give a fair idea of the value of such physical training as the pupils received.

TABLE VI.—*Posture, nutrition, and physical defects in three elementary schools.*

School.	Posture.			Nutrition.			Physical defects.		
	Good.	Fair.	Poor.	Good.	Fair.	Poor.	Eyes.	Adenoids.	Tonsils.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
S.....	39	33	28	55	26	18	20	20	32
C.....	24	42	34	63	19	18	21	18	29
L.....	21	45	34	53	25	22	23	24	31

Table VI shows that the posture rating in S. school was decidedly better than that in either of the other schools. In order to eliminate any source of error in estimating the value of the physical training, the nutrition and physical defects have been included in the same table for the purpose of comparison. Since the nutrition in S. school is lower than that in C. school and the combined percentage of physical defects is higher, the superiority of S. over C. can not be due to either of these factors.

The posture ratings of C. and L. are very nearly equal, though C., with better nutrition and fewer physical defects, should naturally rate higher. It does not seem likely that the poor type of gymnastics at the L. school accounts for this difference. Whether their play is more worth while or the fact that the school has fewer pupils to handle is responsible for the condition can not be definitely stated.

Though it is felt that the effect of play on posture did not have a fair test in the elementary schools, some interesting work in basket ball was carried on in the high school. The Bedford High School team proved itself to be the second best basket-ball team in the State of Indiana, which is fairly conclusive evidence of the thorough training it received. It is worthy of note that even a cursory inspection of these boys showed some examples of fine posture.

CONCLUSIONS.

The posture of school children can not be said to depend entirely, or even chiefly, on any one condition. The following conclusions seem to be confirmed by the facts noted in this study:

1. While good nutrition is a contributing factor to good posture, it is by no means an indispensable condition.
2. Defective vision, adenoids, and bad tonsils tend to have an unfavorable effect on a child's posture.
3. When the hygienic conditions in a school are not of the best, and health measures are inadequate, there is a moderate decrease of good posture and increase of poor posture from the first to the fifth

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grade, inclusive. This is not believed to be a necessary accompaniment of school life, but a condition that may be easily remedied by cooperation of the health and educational authorities.

4. In planning exercise with a view to the promotion of good posture, it is suggested that setting-up exercises be simple and vigorous and play full of energy and vim. Formless, jellyfish gymnastics, or stupid, silly games, played half-heartedly, have little place in the proper physical development of the growing child.

STREAM POLLUTION INVESTIGATIONS.

RECOMMENDATIONS AS TO PLAN AND POLICY MADE BY UNITED STATES PUBLIC HEALTH SERVICE CONSULTANTS IN STREAM POLLUTION INVESTIGATION WORK.

For a number of years past, the Public Health Service has been engaged in a fairly extensive study of problems relating to the sewage pollution of interstate and navigable waterways. The work undertaken has comprised laboratory studies of the fundamental biochemistry of sewage disposal and water-purification; experimental studies of methods for the treatment of sewage and industrial wastes; fairly extensive studies of sewage disposal by dilution in several typical waterways; surveys of the pollution of coastal waters, with special reference to contamination of shellfish; and cooperation with States and municipalities in the study of a number of local problems. In the summer of 1921, upon request of the Surgeon General, Dr. Stephen A. Forbes, professor of biology, University of Illinois, Dr. Edwin O. Jordan, professor of hygiene and bacteriology, University of Chicago, and Mr. Langdon Pearse, sanitary engineer for the Sanitary District of Chicago, very generously consented to serve as consultants. Since their appointment, these consultants have been in close touch with the work now in progress, through periodic conferences with the officers of the Public Health Service engaged in the field work, and reports of current progress.

Desiring to obtain the benefit of their advice in the further development of this work, the Surgeon General recently requested them to submit a full and free expression of their opinion as to the general lines to be followed in future work, quite independent of the plans at present being pursued. The joint memorandum which follows, submitted in compliance with his request, is published in the belief that it will be of considerable interest to State officials, sanitary engineers, and others actively concerned with the problems of stream pollution.

MEMORANDUM.

In accordance with your request of March 25, 1922, we have thoroughly canvassed the questions put before us by your letter, relating to the general plan and policy to be followed in the stream-

pollution investigations of your service. We are agreed in submitting the following for your consideration, as an expression of our joint opinion.

The act under which the United States Public Health Service operates provides:

The Public Health Service may study and investigate the diseases of man and conditions influencing the propagation and spread thereof, including sanitation and sewage and the pollution, either directly or indirectly, of the navigable streams and lakes of the United States, and it may from time to time issue information in the form of publications for the use of the public.

Under this act it would seem that the United States Public Health Service is empowered, at its discretion, to carry on research in sanitary matters, as well as in pure science. The scope is very broad. There appears to be no direct order, as the word "may" is used, not "shall." We believe that this discretion should properly be exercised and that there are legitimate functions which the service can well perform along the lines hereinafter indicated in sanitary research and field investigation.

The present and probable future resources of the service for sanitary work, both in the field and along the lines of research, would seem to be excellent, inasmuch as we believe that exercise of the proper functions of the service will keep in the organization a compact body of trained specialists in biology, chemistry, bacteriology, and allied sciences, who can indicate the proper fields of investigation for extended research.

The present status of the stream-pollution problem and its regulation in the United States is somewhat unsettled as regards any established policy throughout the country. There has been, however, a definite trend in the last 20 years towards improving the condition of streams, and, in particular, those streams in which the nuisance is marked. The tendency to-day is also towards the improvement of streams from which water supplies are taken, and further consideration is being given to the conservation of fish life by stream cleaning. The probability is that, as the country becomes more thickly populated, there will be further pressure for better stream conditions, not only from the standpoint of nuisance, but also to relieve the load upon water-treatment plants using such streams as sources of supply. In so far as the stream pollution problem itself is concerned, the status and tendency seem to be fairly clear, with a trend towards the bettering of conditions in the waterways. On the other hand, the status and tendency of regulation are somewhat clouded by the variation in the different States having authority to act within their borders. This is further complicated by the lack of police powers in many States. A general tendency seems to be to give a central body, like the State board of health, sufficient con-

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trol, in a discretionary way, to advise on sanitary problems in stream pollution. There has not been, as yet, any marked inclination to follow the lead of Ohio in permitting the State to order work constructed under certain stipulated conditions. From the standpoint of regulation of industrial waste pollution, while there is considerable activity, so far this has not always led to a complete solution of the problem, owing to the cost of treatment. The industrial waste problem seems to have been one of more or less local handling, the practice of each State varying considerably. In some States no attempt is made to regulate at all. The indications are, however, that even in States containing the most industries, conditions have come to such a pass that even the industries realize that something must be done. This would seem to favor well-considered action towards regulation.

The resources of the State, municipal, and private organizations for necessary studies of stream pollution appear to be somewhat limited. Only the largest organizations have undertaken such work in the past, and then often with limited funds. Where difficulties are traceable to private organizations it would seem desirable that those organizations bear at least part of the expense of investigation. There appears to be, among the different agencies able to investigate, a lack of coordinated effort to avoid duplication of activities and to advance the work as far as possible.

It would seem that the States and municipalities had sufficient potential authority to regulate stream pollution within their respective boundaries. The responsibility for such regulation might be enlarged. As expressed above, police authority is frequently lacking. It would seem that more uniform laws and practice were desirable; in other words, cooperation of the States interested in an interstate problem through some national agency.

It therefore seems to us that the Public Health Service has, if it desires, a very definite function to perform in the handling of interstate problems of stream pollution and in the investigation of the same, as well as in the investigation of and research into the underlying principles of stream pollution, sewage treatment, water purification, and sanitary science in general. It further seems that there is a very legitimate function in the coordination of effort in interstate relations to a definite policy for all concerned. Regulation of the quality of water for interstate carriers might also properly be reviewed from time to time.

Our opinion as to the relative prominence of different lines of study is expressed in order of importance as follows:

(1) Fundamental studies of basic problems leading to results of general application; for example, studies of analytical methods, the laws of oxygen loss and replacement, the laws covering bacterial

death rates, laws governing the efficiency of filtration, the efficiency of methods of waste disposal, and the laws governing the removal of colloids, dehydration of colloids, color removal from water supplies, etc.

(2) Collective studies bringing together scattered observations; for example, assembling from various sources, material relating to stream pollution conditions, sewage treatment practice, water purification etc., utilizing data available from State and municipal organizations.

These studies should, if possible, be correlated by enough personal contact, and perhaps laboratory work, to put the methods of reporting and analysis upon a common basis. If practicable, more effort should be made towards standardization of laboratory methods and methods of reporting. In this connection, also, might well be considered the practicability of a semiannual review of the progress in the fields of sewage treatment, water purification, and sanitary science, with a view to making more easily available in brief compass the special work being carried on throughout the country, as well as summarizing progress in the work.

Detailed studies of individual interstate waterways might be made over a comparatively short period of time, say two to three months, with the primary object of advising the States concerned as to a uniform plan of regulation, as to policy, of both sewage treatment and water purification. An effort might be made to insure cooperation between the States in carrying out such joint projects.

We do not believe that it is properly a function of the service to cooperate with States and municipalities in studying specific *local* problems not involving interstate relations. Our personal opinion is that these matters should be left to local authorities, and that such a tendency toward centralization should be avoided. Further, we believe that the practice should be avoided, so far as practicable, of detailing men to serve in State or municipal positions without expense to the State or municipality concerned. The practice of detailing men to serve when paid by the State or municipality is not so objectionable, and, under certain conditions, may be very beneficial in starting a useful line of administration.

Our general feeling is that at present, with the studies on the Potomac, Ohio, and Illinois Rivers, the service will have obtained a mass of data on stream pollution which will be applicable to many conditions. We believe the next steps might well be to investigate the loading of water filtration plants in more detail than in the past, and to study the relation of sewage treatment to water purification. In this connection, standards for water supply may well be considered. A beginning in the study of the basic laws

covering the chemistry and bacteriology of the treatment of water and sewage might well be made. In all this work, the investigation should be directed to work along lines leading to some practical application as well as to purely scientific research.

These notes are necessarily somewhat brief. The program for the next year or two, we shall be glad to discuss more fully with the officers engaged in field work, if you desire, as opportunity permits. We feel that there is an ample field of effort open, in which there may be secured results of value to the public health of the Nation.

STEPHEN A. FORBES.

EDWIN O. JORDAN.

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MEASLES.¹

By W. C. RUCKER, Surgeon, United States Public Health Service.

About 10,000 American children died of measles in the year 1920. This does not include a large number who died of broncho-pneumonia, a great number of cases of which, in children, are caused by measles. Approximately 60 per cent of all deaths from broncho-pneumonia occur in children under 5 years of age, a time of life when measles is most likely to occur. But the story of the ravages of this disease is not complete without the mention of the large number of cases of tuberculosis which follow an attack of it. Less frequently inflammation of the ear or the eye may be left behind as a mark of a visitation of this common disease. From a public health standpoint, then, measles is a disease of prime importance.

Long association with a disease breeds a contempt for it, and measles, in common with the other diseases of childhood, has come to be looked upon as an unavoidable accompaniment of youth.

Each autumn when school opens there is an increase in the number of cases of measles, and as the season progresses they gradually increase, and winter frequently sees the disease spreading in epidemic form. Hirsch has collected data of 309 epidemics of measles, and has classified them according to season; summer had 43, autumn had 76, winter had 96, and spring had 94 epidemics.

Measles is a disease of close association; hence its increase during the colder months.

Frequently a child will go to a party and engage in innocent games in which children are brought in close contact with one another. Perhaps among the guests there is one with reddened, watery, eyes, which are sensitive to light. The eyelids are perhaps a little puffy, and the guest has a hard, high-pitched cough. The other children

¹ Revision of Supplement No. 1 to the Public Health Reports, Jan. 24, 1913.

pay no attention to this, and the games go on uninterrupted. In this way a single child in the beginning stages of measles may easily affect 15 or 20 others. This is frequently the case when kissing games are played.

About 10 days later the children who have exposed themselves to the disease begin to sicken. They, too, have red, watery, sensitive eyes and puffy eyelids. In fact, in rather severe cases the whole face has a rather swollen, puffed appearance. The throat feels parched and a dry, irritating cough increases the discomfort. The child is likely to come home from school feeling drowsy and irritable, not infrequently complains of chilly sensations, and may even have a chill. At night the irritation increases, the child is feverish, the whites of the eyeballs show little red lines upon them, and the little sufferer has the appearance of being just ready to cry.

If the anxious mother takes the child to the window in the morning, raises the curtain, and examines the little one's throat she will see that the hard palate and back of the throat are a dull, angry red. Perhaps there are a few little red spots on the hard palate, and if the mother will look closely at the lining membrane of the cheek she will see some small white-tipped, reddish spots. These are called "Koplik's" spots, and are one of the signs of measles.

The child is kept from school that day, and that night his fever is higher than it was the night before. He rolls and tosses about the bed and wakes up his mother a good many times to ask for a drink of water. This sort of thing continues for 3 or 4 days; then, one morning when the child is having its bath the mother sees some little dusky red spots along the hair line. They look a good deal like flea bites. Within 24 hours this rash is spread over the body and the child looks very much bespeckled and swollen. In from 5 to 7 days the rash begins to fade, and within 3 or 4 days thereafter is entirely gone away, leaving behind a faint mottling of the skin. This is followed by a peeling off of the outer layer of the skin in little bran-like pieces. This process is called desquamation, and lasts about a week or 10 days.

In the meantime the fever has gone away and as soon as the child has finished scaling he is permitted to go out and play with the other children, and before long is back at school. The foregoing is a description of a mild case.

If measles assumes a malignant type, as it sometimes does among the nonrobust, it may be ushered in by convulsions, very high fever, and an excessive development of all the ordinary symptoms, or the rash when it appears, instead of being a good healthy-looking red, may be a bluish-black discoloration which looks like a recent bruise. Broncho-pneumonia, the most common and the most fatal of all the

complications of measles, is very likely to occur. The cough is very painful, and death quickly relieves the sufferer.

The two forms of the disease which have just been cited are in no way exaggerated and unfortunately they are of far too common occurrence. The first child received the infection directly in the harmless games at the party by coming in intimate contact with a child who was just coming down with measles at a time when, according to the researches of Anderson and Goldberger in the Hygienic Laboratory of the United States Public Health Service, the infecting virus is most active. Their work seems to show that the infection does not persist after the fever has gone away.

While all of the severe cases may not be as grave as the one which was cited above, it must be admitted, nevertheless, that bronchopneumonia is the great menace of measles. Fifty-odd years ago Gregory wrote, "I am sure I speak much within bounds when I say that nine-tenths of the deaths by measles occur in consequence of pneumonia." Less frequently there are other complications, and the eyes, ears, the central nervous system, heart, and the skin may, any one of them, suffer. Sometimes there is gangrene at the corners of the mouth, and this may result in death or horrible deformity.

Measles, then, is a serious disease, sparing practically no exposed person who has not had it. In 1846 it attacked the Faroe Islands, and the record of that visitation is both remarkable and instructive. The island had been free from the disease for 65 years, when a Danish cabinetmaker returned from Copenhagen to Thorshavn with the disease. He infected two friends, and the epidemic increased by leaps and bounds, until within a very short time over 6,000 persons out of a population of 7,782 were attacked. Almost every house on the island became a hospital, and the only persons who passed through the visitation unscathed were old inhabitants who had had the disease as children 65 years before. Not a single old person who was not protected by a previous attack and who was exposed to the infection failed to contract the disease.

This is one of the oldest ailments with which man has been afflicted. In fact the word "measles" traces its genealogy back through the German "masern" to the Sanskrit "masura," a word meaning "spots." The writings of the ancient Arabian physicians are replete with mention of this disease. The Italians, who evidently regarded it no more seriously than we do, called it "morbillo," which means "little sickness."

Time and again measles has been widely diffused on Asiatic and European soil, and shortly after the colonization of America it appeared in our Colonies. Many are the quaint records of its visitations, not the least interesting of which is a letter which appeared in the Boston Evening Post, November 12, 1739, entitled "A letter about

good management under the distemper of measles at this time spreading in the country, here published for the benefit of the poor and such as may want help of able physicians." It is signed "Your hearty friend and servant," and the authorship is attributed to Cotton Mather. It is stated that this letter is a reprint of one which Doctor Mather wrote shortly before his death, in 1728.

At present the disease is distributed over the entire habitable globe, from Iceland on the north to Tierra del Fuego on the south. It occurs most often and more severely in the colder months, probably because at such times people are more closely crowded together under more insanitary conditions. When introduced among a people who have never suffered from it before, its ravages are frightful, as in the case of the inhabitants of certain of the Fiji Islands, who, upon being exposed to the infection, fell ill and died by thousands, so that it is estimated that 20,000 deaths occurred in four months. The epidemic ceased only after almost every person on the island had been infected.

In 1917 three States had a death rate from this disease of over 40 per 100,000, and several cities had even a higher rate. The death rate for measles for the registration area of the United States during the period 1911 to 1919 has ranged from 3.9 per 100,000 in 1919 to 14.3 in 1917.

The death rate among those attacked varies from one-half of 1 to 35 per cent. If it is estimated that the death rate is 1 per cent, and the number of deaths from measles in the United States during the year 1920 was 10,000, then it would follow that during that year at least 1,000,000 children suffered from this disease. When it is considered that perhaps 30 per cent of these children were of school age, and that the disease occurs most often during the months of school attendance, then it will be seen that approximately 300,000 children were kept from school from six weeks to two months on account of measles. Leaving out of consideration the death and suffering produced in this way, this is a serious economic loss.

Measles is a frequent accompaniment of war, or any other occasion which brings large numbers of persons together under unhygienic conditions. In fact, measles is one of the most formidable of camp diseases. This fact is well demonstrated by morbidity and mortality statistics of the Civil War. At that time the mortality rate was very high in the general field hospital at Chattanooga, being 22.4 per cent, and in the general field hospital at Nashville it was 19.6 per cent. In 1865 there were 38,000 cases with 1,900 deaths from measles in the Confederate Army. It is reported that during the Brazilio-Paraguayan War an epidemic of measles swept off nearly a fifth of the Paraguayan Army in three months. Measles was a serious hazard to life and efficiency in the mobilization and training camps during the World War.

It is thus seen that measles is many times a very severe disease, one which can not be dealt with lightly, one to which we should not expose our children. The longer one can put off having measles the better, because the younger the child is when it has measles the more likely it is to die, and the more likely it is to suffer severe effects from it even if it does not die. The most fatal period is from 2 to 5 years of age.

A child with measles should be put to bed and kept there as long as it has any fever or cough. The room should be airy, but it should be darkened, because children with measles are very sensitive to light. The bedclothes should be light, because the child is likely to get too warm, kick off the covers, and suffer from the cold. A chilling in this way may predispose to pneumonia. Food should be light and should consist chiefly of nutritious broths, pasteurized milk, soft-boiled eggs, and the like. Iced lemonade will bring comfort to the inflamed throat. The child's eyes should be kept clean; and should the fever get high, the comfort of the little sufferer may be increased by sponging with tepid water and alcohol. Sometimes it is necessary to put an ice bag to the head; but if the child is sick enough to require this, skilled assistance should be summoned.

When the fever and cough have gone, the child may be allowed to be up and about the room, but for a time should not indulge in violent exercise, because there is often some weakening of the heart muscle by the disease. The aim is to allow the heart muscle to regain its normal condition before putting too much strain upon it. The diet should be increased when the fever has gone away, and should include good, plain, strong foods. If there is a tendency to regain weight and strength slowly, the child may be given an increased amount of pasteurized cream or good butter. If the child prefers cod-liver oil, this may be substituted.

The important point about the prevention of the disease is the fact that, judging from the experiments of Anderson and Goldberger above referred to, measles is rarely transmissible after the fever has gone down. Experimenting with monkeys, they found that they were unable to transmit measles from monkey to monkey after the stage of fever had ceased. It used to be thought that the germs of measles were in the scales of skin which were shed at the close of the disease.

It is thought by some that there may be chronic carriers of measles, but this is not at all proved. It is also believed that a discharging ear following measles may be the means of continuing the transmission of the disease. This is not proved. There are on record a large number of instances which seem to point to the fact that under certain conditions a third person may carry the infection from the sick to the well. Transmission of measles to human beings by the lower animals is still unproved.

The cause of measles is not known. A great many scientists have described germs which they believe to be the causal agents, but up to date these have not been positively proved to be the cause of measles. We do, however, know that the infection of measles is one of the most highly communicable infections known to man and is found in the secretions from the nose and throat during the first stages of the disease, therefore, persons suffering with measles should not be allowed to come in contact with well persons until the period of fever has well passed.

Since the disease is known to be spread by the sputum and nasal secretions, the prime measure in the prevention of this disease is to prevent the sputum and nasal secretions from the sick from being taken into the system of well persons. Children with measles should be provided with a quantity of soft paper napkins; and as soon as the napkins become soiled, they should be burned. Children should be taught that they must always hold a handkerchief in front of the mouth while coughing. This is a measure which tends to control the spread of a good many diseases besides measles, because during coughing and sneezing, sputum may be thrown several feet. Everything which has come into contact with measles patients should be sterilized before it is allowed to come in contact with other people or other things which may be handled or used by other people. Bedclothes, napkins, table linen, towels, and the like may be sterilized by boiling. Special dishes, drinking glasses, knives, forks, spoons, etc., should be set aside for the measles patient and carefully sterilized after each using.

When it is known that measles exists in a community, no child having a bad cough should be allowed to come in contact with other children during the first three or four days of the cough.

It is little less than criminal to permit children known to have measles to come in contact with well children. In this connection it may be remarked that while it is generally considered that one attack of measles confers immunity, there are many cases on record of second and third attacks. It is true that the second attacks are usually very mild, but too great reliance should not be placed on this immunity.

Children should be discouraged, as far as possible, from playing games which will permit of an interchange of nasal or mouth secretions. It is the duty of every parent having measles in the home to see to it that it is reported to the public-health authorities. It is equally the duty of parents to see to it that their children do not come in contact with well children during the time when the infection may be transmitted. Measles kills more people in the United States every year than smallpox. You can't kill a child any deader with smallpox than you can with measles. It is the duty of private citizens and municipalities to take every known measure for the prevention of the spread of this disease.

DEATH RATES IN A GROUP OF INSURED PERSONS.

DEATH RATES FOR PRINCIPAL CAUSES, MAY AND JUNE, 1922, AND COMPARISON BY COLOR FOR FIRST SIX MONTHS OF 1920, 1921, AND 1922.

The accompanying tables are taken from the Statistical Bulletin of the Metropolitan Life Insurance Co. for July, 1922. They present the mortality experience of the company for principal causes of death for May and June, 1922, and compare the rates by color for the first six months of the years 1920, 1921, and 1922. The figures are based on a strength of approximately 14,000,000 insured persons.

The death rate in this group for June, 1922, shows a marked downward swing, being 6.5 per cent lower than the rate for May and 4.4 per cent lower than that for June, 1921. As compared with June, 1921, decidedly lower mortality rates are shown for scarlet fever, whooping cough, and diphtheria, and slightly lower rates for tuberculosis, typhoid fever, pneumonia, diarrhea and enteritis, and Bright's disease.

The gross death rate for the first half of 1922 is stated to be only slightly higher than that for the corresponding period of 1921, the record low rate in the experience of the company. Low mortality from diphtheria, tuberculosis, and most other infectious diseases contributed to this low rate. Increased mortality for the first half of 1922 over the corresponding period of 1921 is shown for influenza, pneumonia, organic heart disease, chronic nephritis, and measles. Officials of the company attribute the lower rate for diphtheria partly to the wider application of the Schick test and use of the toxin-antitoxin mixture.

Death rates (annual basis) for principal causes per 100,000 lives exposed, May and June, 1922, and June and year 1921.

Cause of death.	Death rate per 100,000 lives exposed.			
	June, 1922.	May, 1922.	June 1921. ¹	Year 1921. ¹
Total, all causes.....	904.7	967.7	945.9	870.6
Typhoid fever.....	5.2	3.7	5.4	6.7
Measles.....	7.6	8.8	3.2	3.2
Scarlet fever.....	2.4	4.6	8.2	7.0
Whooping cough.....	2.1	2.3	4.0	3.9
Diphtheria.....	11.1	12.6	20.3	23.8
Influenza.....	10.1	20.9	4.4	8.7
Tuberculosis (all forms).....	133.7	131.3	137.7	117.4
Tuberculosis of respiratory system.....	119.5	119.3	125.1	105.6
Cancer.....	72.5	76.1	79.4	71.7
Cerebral hemorrhage.....	62.8	62.6	60.4	62.1
Organic diseases of heart.....	126.9	141.4	123.5	117.4
Pneumonia (all forms).....	52.1	82.5	56.5	67.8
Other respiratory diseases.....	11.4	17.6	14.3	14.1
Diarrhea and enteritis.....	11.9	7.8	13.9	14.2
Bright's disease (chronic nephritis).....	73.4	72.7	74.4	63.0
Puerperal state.....	20.6	18.5	21.5	19.8
Suicides.....	8.6	8.3	8.0	7.6
Homicides.....	5.7	6.1	7.8	6.7
Other external causes (excluding suicides and homicides).....	63.3	55.2	68.7	57.6
Traumatism by automobile.....	13.7	12.4	14.3	12.2
All other causes.....	223.3	234.7	234.3	192.9

¹ Provisional figures for 1921 given in preceding numbers of the 1922 bulletins have been revised on the basis of final tabulations of 1921 data.

Death rates (annual basis) for principal causes per 100,000 persons exposed, compared by color for the first six months of 1920, 1921, and 1922.

Cause of death.	Death rate per 100,000 persons exposed.					
	White.			Colored.		
	Jan.-June 1922	Jan.-June 1921	Jan.-June 1920	Jan.-June 1922	Jan.-June 1921	Jan.-June 1920
All causes of death.....	923.0	872.9	1,115.0	1,489.5	1,396.2	1,744.9
Typhoid fever.....	3.2	3.8	4.3	6.3	6.9	8.0
Measles.....	6.4	5.4	14.7	2.0	2.6	5.6
Scarlet fever.....	7.1	10.3	8.1	.6	3.6	.5
Whooping cough.....	2.7	4.7	7.9	3.5	7.8	9.7
Diphtheria.....	19.9	26.4	25.1	8.1	6.2	6.3
Influenza.....	32.7	11.0	96.0	68.1	24.3	149.5
Meningococcus meningitis.....	.7	1.1	1.2	.6	1.0	1.6
Tuberculosis (all forms).....	103.5	110.0	136.6	260.1	284.6	319.3
Tuberculosis of respiratory system.....	93.2	98.9	123.2	238.7	259.2	292.9
Tuberculosis of maninges, etc.....	4.7	5.6	6.7	5.4	6.4	6.8
Other forms of tuberculosis.....	5.6	5.5	6.8	16.0	19.0	19.6
Cerebral hemorrhage, apoplexy.....	65.8	60.6	64.6	101.2	92.1	93.8
Organic diseases of the heart.....	138.5	119.5	130.4	206.9	178.0	192.6
Total respiratory diseases.....	114.1	102.1	186.9	182.9	160.4	208.5
Bronchitis.....	7.1	6.6	11.7	12.4	12.7	14.6
Bronchopneumonia.....	35.8	30.9	54.8	44.4	39.9	63.2
Pneumonia, lobar and undefined.....	62.7	55.6	107.5	113.4	95.1	205.0
Other diseases of respiratory system.....	8.6	8.9	12.9	12.7	12.7	15.7
Diarrhea and enteritis.....	7.8	10.7	10.7	11.7	11.0	10.5
Under 2 years.....	3.6	4.0	4.7	3.0	2.4	3.6
2 years and over.....	4.2	6.7	6.1	8.7	8.6	6.9
Acute nephritis.....	5.6	5.5	6.0	13.1	16.8	21.2
Chronic nephritis.....	70.6	67.6	75.5	125.4	110.4	118.7
Total puerperal state.....	20.6	21.2	26.1	27.3	29.8	34.2
Puerperal septicemia.....	7.7	10.0	8.3	11.1	13.2	13.7
Puerperal albuminuria and convulsions.....	5.1	4.6	4.7	6.7	7.4	7.1
Other diseases of puerperal state.....	7.9	6.7	13.1	9.6	9.1	13.4
Total external causes.....	63.7	63.4	63.0	80.3	94.7	97.0
Suicides.....	8.3	7.9	6.2	5.0	5.4	4.1
Homicides.....	3.5	3.6	3.1	24.7	26.7	20.2
Accidental and unspecified violence*.....	51.8	51.8	53.1	59.6	62.5	62.3
Accidental drowning.....	5.4	6.1	4.2	6.9	6.2	5.3
Automobile accidents.....	11.1	10.8	8.1	6.2	8.3	4.4
War deaths.....	1	2	7	(*)	1	4
All other and ill-defined causes of death.....	255.1	249.5	257.6	377.2	366.1	387.8

* Includes "War deaths."

* Excludes "War deaths."

* No deaths.

DEATHS DURING WEEK ENDED AUGUST 12, 1922.

Summary of information received by telegraph from industrial insurance companies for week ended August 12, 1922, and corresponding week 1921. (From the Weekly Health Index, August 15, 1922, issued by the Bureau of the Census, Department of Commerce.)

	Week ended Aug. 12, 1922.	Corresponding week 1921.
Policies in force.....	49,782,150	46,850,375
Number of death claims.....	7,401	7,048
Death claims per 1,000 policies in force, annual rate.....	7.8	7.8

Deaths from all causes in certain large cities of the United States during the week ended August 12, 1922, infant mortality, annual death rate, and comparison with corresponding week of 1921. (From the Weekly Health Index, August 15, 1922, issued by the Bureau of the Census, Department of Commerce.)

City.	Estimated population July 1, 1922.	Week ended Aug. 12, 1922.		Annual death rate per 1,000 corresponding week 1921.	Deaths under 1 year.		Infant mortality rate, week ended Aug. 12, 1922. ²
		Total deaths.	Death rate. ¹		Week ended Aug. 12, 1922.	Corresponding week 1921.	
Total	27,927,877	5,436	10.1	10.7	883	1,056	.....
Akron, Ohio	208,435	19	4.8	6.6	3	5	32
Albany, N. Y.	116,223	25	11.2	14.0	1	7	22
Atlanta, Ga.	220,047	66	15.6	16.3	8	4	.....
Baltimore, Md.	762,222	170	11.6	12.6	40	40	113
Birmingham, Ala.	191,017	41	11.2	16.8	5	11	.....
Boston, Mass.	764,017	188	12.8	11.6	30	31	80
Bridgeport, Conn.	143,555	26	9.4	8.0	5	5	62
Buffalo, N. Y.	528,163	133	13.1	11.7	27	24	106
Cambridge, Mass.	110,914	29	9.4	11.3	2	7	37
Camden, N. J.	121,915	28	12.0	7.8	9	7	138
Chicago, Ill.	2,833,288	533	9.8	10.4	82	102	.....
Cincinnati, Ohio	404,855	78	10.0	11.4	6	13	40
Cleveland, Ohio	851,003	139	8.5	10.3	28	43	72
Columbus, Ohio	233,455	58	11.9	13.6	7	7	74
Dallas, Tex.	171,974	30	9.1	7.6	3	3	.....
Dayton, Ohio	161,824	31	10.0	7.6	3	6	51
Denver, Colo.	267,591	60	11.7	13.3	7	6	.....
Detroit, Mich.	953,678	179	9.4	9.9	41	42	79
Fall River, Mass.	120,790	27	11.7	10.4	5	5	70
Fort Worth, Tex.	114,717	17	7.7	.....	4	.....	.....
Grand Rapids, Mich.	143,572	20	7.3	8.9	3	4	50
Houston, Tex.	150,087	22	7.6	13.0	2	7	.....
Indianapolis, Ind.	333,257	77	12.0	12.2	11	15	84
Jersey City, N. J.	305,911	50	8.5	10.5	15	14	96
Kansas City, Mo.	343,988	64	9.7	11.9	14	21	.....
Los Angeles, Calif.	634,806	160	13.1	12.1	17	22	71
Louisville, Ky.	236,877	55	12.1	8.6	7	4	.....
Lowell, Mass.	114,423	22	10.0	11.0	4	7	67
Memphis, Tenn.	167,862	35	10.9	11.3	5	5	.....
Milwaukee, Wis.	476,603	68	7.4	8.8	7	20	34
Minneapolis, Minn.	400,970	90	11.7	8.9	11	6	60
Nashville, Tenn.	122,832	42	17.8	10.3	7	3	.....
New Bedford, Mass.	127,542	19	7.8	10.0	4	8	59
New Haven, Conn.	169,967	43	13.2	10.0	8	3	98
New Orleans, La.	390,616	99	12.9	14.1	10	12	.....
New York, N. Y.	5,839,746	1,027	9.2	9.5	163	210	63
Newark, N. J.	431,792	84	10.1	10.3	23	23	102
Norfolk, Va.	124,915	29	12.1	10.8	7	3	124
Oakland, Calif.	235,279	44	9.8	7.4	3	2	38
Omaha, Nebr.	200,739	33	8.6	15.6	2	8	22
Paterson, N. J.	138,521	20	7.5	13.3	3	12	46
Philadelphia, Pa.	1,804,500	407	11.2	10.5	82	72	97
Pittsburgh, Pa.	607,902	122	10.5	13.0	22	45	70
Portland, Oreg.	269,240	62	12.0	10.0	4	3	40
Providence, R. I.	241,011	50	10.8	12.2	13	19	103
Richmond, Va.	178,365	34	9.9	11.0	6	9	73
Rochester, N. Y.	311,548	42	7.0	10.4	10	13	77
St. Louis, Mo.	795,008	134	8.8	9.9	15	14	.....
St. Paul, Minn.	239,836	47	10.2	7.5	7	1	66
Salt Lake City, Utah	123,918	31	13.0	9.9	6	4	39
San Antonio, Tex.	178,056	43	12.6	.....	11	.....	.....
San Francisco, Calif.	529,792	104	10.0	13.7	3	7	17
Seattle, Wash.	315,312	45	7.4	6.2	1	3	85
Spokane, Wash.	104,445	14	7.0	12.0	2	4	43
Springfield, Mass.	140,052	28	10.4	14.2	8	8	119
Syracuse, N. Y.	181,012	30	8.6	11.2	7	11	84
Toledo, Ohio	260,717	37	7.4	11.1	7	12	68
Trenton, N. J.	125,075	36	15.0	18.3	8	10	122
Washington, D. C.	437,571	97	11.6	12.4	8	17	46
Wilmington, Del.	115,568	28	12.6	12.4	7	7	136
Worcester, Mass.	188,449	34	9.4	9.0	4	10	43
Yonkers, N. Y.	105,422	19	9.4	5.6	5	1	104
Youngstown, Ohio	144,970	21	7.6	16.1	4	9	53

¹ Annual rate per 1,000 population.

² Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1921. Cities left blank are not in the registration area for births.

³ Enumerated population Jan. 1, 1920.

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended August 19, 1922.

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers.

ALABAMA.	Cases.	COLORADO. (Exclusive of Denver.)	Cases.
Chicken pox.....	1	Chicken pox.....	1
Diphtheria.....	39	Diphtheria.....	9
Hookworm disease.....	24	Poliomyelitis.....	1
Influenza.....	3	Scarlet fever.....	11
Malaria.....	48	Tuberculosis.....	30
Mumps.....	3	Typhoid fever.....	10
Pellagra.....	6	Whooping cough.....	1
Scarlet fever.....	11		
Smallpox.....	1		
Tetanus.....	2		
Tuberculosis.....	14		
Typhoid fever.....	63		
Whooping cough.....	7		
		CONNECTICUT.	
		Cerebrospinal meningitis.....	1
ARKANSAS.		Diphtheria.....	20
Diphtheria.....	8	Dysentery (bacillary).....	1
Hookworm disease.....	2	Malaria.....	2
Influenza.....	2	Measles.....	20
Malaria.....	257	Mumps.....	5
Pellagra.....	7	Paratyphoid fever.....	1
Scarlet fever.....	6	Pneumonia (lobar).....	6
Trachoma.....	1	Poliomyelitis.....	1
Tuberculosis.....	24	Scarlet fever.....	10
Typhoid fever.....	23	Trachoma.....	1
Whooping cough.....	7	Tuberculosis (all forms).....	27
		Typhoid fever.....	10
		Whooping cough.....	24
		DELAWARE.	
		Cerebrospinal meningitis—Wilmington.....	1
Cerebrospinal meningitis:		Cholera infantum.....	1
Gilroy.....	1	Malaria.....	1
Long Beach.....	1	Measles.....	1
Los Angeles.....	1	Pneumonia.....	1
Stockton.....	1	Scarlet fever.....	2
Diphtheria.....	91	Tuberculosis.....	11
Influenza.....	6	Typhoid fever.....	5
Jaundice (infectious).....	1		
Lethargic encephalitis—			
Santa Barbara County.....	1	FLORIDA.	
Measles.....	9	Dengue.....	212
Scarlet fever.....	27	Diphtheria.....	12
Smallpox.....	10	Influenza.....	21
Typhoid fever.....	16	Malaria.....	54

August 25, 1922.

FLORIDA—continued.

	Cases.
Smallpox.....	2
Tetanus.....	1
Typhoid fever.....	6

GEORGIA.

	Cases.
Anthrax.....	1
Dengue.....	1
Diphtheria.....	65
Dysentery (bacillary).....	1
Hookworm disease.....	16
Influenza.....	2
Malaria.....	84
Measles.....	1
Paratyphoid fever.....	4
Pellagra.....	2
Pneumonia.....	3
Scarlet fever.....	11
Septic sore throat.....	2
Tuberculosis (pulmonary).....	5
Typhoid fever.....	36
Whooping cough.....	1

ILLINOIS.

	Cases.
Diphtheria:	
Chicago.....	75
Scattering.....	79
Influenza.....	21
Pneumonia.....	145
Poliomyelitis:	
Chicago.....	2
Crawford County.....	1
McHenry County.....	1
St. Clair County.....	1
Scarlet fever:	
Chicago.....	25
Scattering.....	47
Smallpox.....	10
Typhoid fever.....	59
Whooping cough.....	221

INDIANA.

	Cases.
Diphtheria.....	27
Rabies in animals—Vigo County.....	2
Scarlet fever.....	18
Smallpox.....	1
Typhoid fever.....	26

IOWA.

	Cases.
Diphtheria.....	23
Scarlet fever.....	8
Smallpox.....	2

KANSAS.

	Cases.
Cerebrospinal meningitis.....	2
Chicken pox.....	3
Diphtheria.....	36
Malaria.....	3
Measles.....	5
Mumps.....	4
Pneumonia.....	5
Scarlet fever.....	31
Smallpox.....	2
Tetanus.....	4
Tuberculosis.....	56
Typhoid fever.....	26
Whooping cough.....	42

LOUISIANA.

	Cases.
Cerebrospinal meningitis.....	1
Diphtheria.....	10
Malaria.....	53
Pellagra.....	2
Scarlet fever.....	4
Typhoid fever.....	18
Whooping cough.....	6

MARYLAND.¹

	Cases.
Cerebrospinal meningitis.....	1
Chicken pox.....	10
Diphtheria.....	27
Dysentery.....	13
Influenza.....	21
Malaria.....	16
Measles.....	19
Mumps.....	8
Ophthalmia neonatorum.....	1
Paratyphoid fever.....	2
Pneumonia (all forms).....	13
Scarlet fever.....	15
Septic sore throat.....	2
Tetanus.....	1
Tuberculosis.....	76
Typhoid fever.....	54
Whooping cough.....	27

MASSACHUSETTS.

	Cases.
Cerebrospinal meningitis.....	2
Chicken pox.....	10
Conjunctivitis (suppurative).....	7
Diphtheria.....	98
Dysentery.....	2
German measles.....	1
Hookworm disease.....	2
Lethargic encephalitis.....	2
Malaria.....	1
Measles.....	67
Mumps.....	15
Ophthalmia neonatorum.....	18
Pneumonia (lobar).....	19
Poliomyelitis.....	12
Scarlet fever.....	55
Septic sore throat.....	3
Tetanus.....	3
Trachoma.....	2
Tuberculosis (all forms).....	134
Typhoid fever.....	13
Whooping cough.....	110

MINNESOTA.

	Cases.
Chicken pox.....	4
Diphtheria.....	46
Measles.....	7
Pneumonia.....	2
Poliomyelitis.....	1
Scarlet fever.....	57
Smallpox.....	14
Tuberculosis.....	140
Typhoid fever.....	13
Whooping cough.....	6

MISSISSIPPI.

	Cases.
Diphtheria.....	31
Scarlet fever.....	7
Smallpox.....	2
Typhoid fever.....	22

¹ Week ended Friday.

	MONTANA.	CASES.	NORTH CAROLINA—continued.	CASES.
Diphtheria.....	3	German measles.....	1	
Poliomyelitis.....	2	Mesles.....	19	
Rocky Mountain spotted or tick fever—Hamilton.....	1	Poliomyelitis.....	2	
Scarlet fever.....	3	Scarlet fever.....	47	
Smallpox.....	3	Septic sore throat.....	5	
Typhoid fever.....	5	Smallpox.....	8	
NEBRASKA.		Typhoid fever.....	77	
Chicken pox.....	2	Whooping cough.....	93	
Diphtheria.....	4	OREGON.		
Measles.....	1	Chicken pox.....	6	
Mumps.....	4	Diphtheria:		
Scarlet fever.....	9	Portland.....	11	
Tuberculosis.....	3	Scattering.....	7	
Whooping cough.....	6	Measles.....	1	
NEW JERSEY.		Scarlet fever.....	4	
Cerebrospinal meningitis.....	1	Smallpox—Portland.....	10	
Chicken pox.....	17	Tuberculosis.....	4	
Diphtheria.....	75	Typhoid fever:		
Dysentery.....	2	The Dalles.....	9	
Influenza.....	5	Scattering.....	3	
Malaria.....	4	Whooping cough.....	3	
Measles.....	54	SOUTH DAKOTA.		
Pneumonia.....	36	Anthrax.....	1	
Poliomyelitis.....	5	Diphtheria.....	1	
Scarlet fever.....	43	Measles.....	2	
Trachoma.....	1	Pneumonia.....	2	
Typhoid fever.....	35	Scarlet fever.....	8	
Whooping cough.....	103	Smallpox.....	6	
NEW MEXICO.		Tuberculosis.....	6	
Chicken pox.....	1	Typhoid fever.....	1	
Diphtheria.....	8	TEXAS.		
Malaria.....	3	Diphtheria.....	36	
Measles.....	1	Mumps.....	23	
Paratyphoid fever.....	3	Pellagra.....	8	
Pellagra.....	1	Pneumonia.....	6	
Poliomyelitis.....	2	Scarlet fever.....	13	
Scarlet fever.....	2	Typhoid fever.....	28	
Tetanus.....	1	VERMONT.		
Tuberculosis.....	9	Chicken pox.....	1	
Typhoid fever.....	12	Diphtheria.....	9	
Whooping cough.....	3	Measles.....	1	
NEW YORK.		Mumps.....	2	
(Exclusive of New York City.)		Poliomyelitis.....	1	
Diphtheria.....	93	Scarlet fever.....	1	
Influenza.....	4	Typhoid fever.....	1	
Measles.....	89	Whooping cough.....	14	
Pneumonia.....	35	WASHINGTON.		
Poliomyelitis:		Chicken pox.....	2	
Ogdensburg.....	4	Diphtheria.....	13	
Syracuse.....	3	Measles.....	3	
Scattering.....	14	Mumps.....	2	
Scarlet fever.....	58	Scarlet fever.....	6	
Smallpox.....	2	Smallpox.....	6	
Typhoid fever.....	54	Tuberculosis.....	28	
Whooping cough.....	162	Typhoid fever.....	12	
NORTH CAROLINA.		Whooping cough.....	29	
Cerebrospinal meningitis.....	2	WEST VIRGINIA.		
Chicken pox.....	7	Diphtheria.....	10	
Diphtheria.....	260	Typhoid fever.....	8	

August 25, 1922.

WISCONSIN.

	Cases.
Milwaukee:	
Chicken pox.....	1
Diphtheria.....	1
Measles.....	35
Mumps.....	2
Pneumonia.....	2
Poliomyelitis.....	1
Scarlet fever.....	3
Tuberculosis.....	12
Typhoid fever.....	1
Whooping cough.....	79
Scattering:	
Chicken pox.....	7
Diphtheria.....	43
Measles.....	22
Pneumonia.....	1

WISCONSIN—continued.

	Cases.
Scattering—Continued:	
Poliomyelitis.....	3
Scarlet fever.....	28
Smallpox.....	9
Tuberculosis.....	25
Typhoid fever.....	2
Whooping cough.....	84

WYOMING.

	Cases.
Cerebrospinal meningitis:	
Fremont County.....	1
Tularaemia:	
Big Horn County.....	1
Park County.....	2
Scattering:	
Typhoid fever.....	9

Delayed Reports for Week Ended August 12, 1922.

CONNECTICUT.

	Cases.
Cerebrospinal meningitis.....	2
Chicken pox.....	4
Diphtheria:	
Bridgeport.....	8
Scattering.....	14
Dysentery (bacillary).....	1
Lethargic encephalitis.....	1
Malaria.....	1
Measles.....	31
Mumps.....	2
Paratyphoid fever.....	1
Pneumonia (lobar).....	5
Poliomyelitis.....	4
Scarlet fever.....	27
Smallpox.....	1
Tetanus.....	1
Tuberculosis (all forms).....	39
Typhoid fever.....	13
Whooping cough.....	35

DISTRICT OF COLUMBIA.

	Cases.
Diphtheria.....	1
Lethargic encephalitis.....	1
Measles.....	3
Tuberculosis.....	20
Typhoid fever.....	6
Whooping cough.....	27

MAINE.

	Cases.
Cerebrospinal meningitis.....	2
Chicken pox.....	6
Diphtheria.....	14
Measles.....	2
Mumps.....	4
Poliomyelitis.....	1
Scarlet fever.....	15
Tetanus.....	1
Tuberculosis.....	3
Typhoid fever.....	8
Whooping cough	2

MISSOURI.

	Cases.
Chicken pox.....	9
Diphtheria.....	34
Epidemic sore throat.....	5
Measles.....	14
Ophthalmia neonatorum	1
Pneumonia.....	5
Scarlet fever.....	11
Smallpox.....	1
Tetanus.....	1
Trachoma.....	4
Tuberculosis.....	48
Typhoid fever.....	46
Whooping cough.....	5

SUMMARY OF CASES REPORTED MONTHLY BY STATES.

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
JULY, 1922.										
Louisiana.....	1	51	5	210	6	38	6	19	128	123
Michigan.....		321			519		7	353	49	69
New York.....	17	1,048	34	18	2,949		18	618	3	221
Pennsylvania.....	12	762			2,757		9	434	1	273
West Virginia.....	2	117	10		46		1	70	38	156

August 25, 1922.

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CITY REPORTS FOR WEEK ENDED AUGUST 5, 1922.

ANTHRAX.

City.	Cases.	Deaths.
Michigan: Detroit.....	1

CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre- vious years.	Week ended Aug. 5, 1922.		City.	Median for pre- vious years.	Week ended Aug. 5, 1922.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama: Birmingham.....	0	1	1	Michigan: Detroit.....	1	.....	1
California: Los Angeles.....	0	1	.....	Minnesota: Rochester.....	1	1	1
Connecticut: New Haven.....	0	1	.....	New Jersey: Newark.....	1	1	1
New London.....	0	1	1	Plainfield.....	0	2	.....
Iowa: Burlington.....	0	1	1	New York: Buffalo.....	0	.....	1
Kansas: Kansas City.....	0	2	.....	Cohoes.....	0	1	1
Maryland: Baltimore.....	1	1	.....	Newburgh.....	0	1	1
				New York: Philadelphia.....	5	4	1
				Pennsylvania: Philadelphia.....	1	3	1

DENGUE.

City.	Cases.	Deaths.
Florida: Tampa.....	125	.....
Texas: Galveston.....	40	.....

DIPHTHERIA.

See p. 2071; also Telegraphic weekly reports from States, p. 2082, and Monthly summaries by States, p. 2065.

INFLUENZA.

City.	Cases.		Deaths, week ended Aug. 5, 1922.	City.	Cases.		Deaths, week ended Aug. 5, 1922.
	Week ended Aug. 6, 1921.	Week ended Aug. 5, 1922.			Week ended Aug. 6, 1921.	Week ended Aug. 5, 1922.	
California: Los Angeles.....	2	.....		Maryland: Baltimore.....	1	.....
San Francisco.....	5	.....	1	New Jersey: Newark.....	1	41	.....
Santa Barbara.....		1		New York: Albany.....	3	1	.....
District of Columbia: Washington.....	1	.....		New York: New York.....	8	9	1
Florida: Tampa.....		1		Ohio: Akron.....		1	.....
Georgia: Atlanta.....	1	.....		Pennsylvania: Philadelphia.....	1	.....
Illinois: Chicago.....	3	1	.....	West Virginia: Clarksburg.....		1	1
Kansas: Salina.....	2	.....				

August 25, 1922.

CITY REPORTS FOR WEEK ENDED AUGUST 5, 1922—Continued.
LETHARGIC ENCEPHALITIS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California: San Francisco.....	1	2	Wisconsin: Oshkosh.....	1	.....

MALARIA.

Alabama: Birmingham.....	2	.....	Massachusetts: Lowell.....	1	1
Arkansas: Little Rock.....	4	.....	New York: New York.....	4	1
California: Sacramento.....	2	.....	Ohio: Cleveland.....	2	.....
Connecticut: New Britain.....	1	.....	Oklahoma: Oklahoma.....	1	.....
Georgia: Albany.....	2	.....	Tennessee: Memphis.....	13	4
Macon.....	6	.....	Texas: Dallas.....	3	.....
Savannah.....	1	1	Fort Worth.....	1	1
Louisiana: New Orleans.....	1	.....		

MEASLES.

See p. 2071; also Telegraphic weekly reports from States, p. 2062, and Monthly summaries, by States, p. 2065.

PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama: Mobile.....		2	North Carolina: Raleigh.....		1
Georgia: Atlanta.....		1	South Carolina: Charleston.....		2
Massachusetts: Boston.....	1	.....		

PNEUMONIA (ALL FORMS).

Alabama: Birmingham.....		4	Indiana: Fort Wayne.....		1
California: Long Beach.....	1	.....	Muncie.....	2	.....
Los Angeles.....	8	6	Terre Haute.....		1
Oakland.....	1	.....	Kansas: Fort Scott.....	1	1
Sacramento.....	2	.....	Kansas City.....	2	.....
San Bernardino.....		2	Wichita.....		1
San Diego.....	4	4	Kentucky: Lexington.....		1
San Francisco.....	7	3	Louisville.....	1	1
Santa Barbara.....		1	Louisiana: New Orleans.....	10	5
Colorado: Denver.....		4	Maine: Lewiston.....	1	..
Connecticut: Bridgeport.....	1	3	Maryland: Baltimore.....	15	12
Greenwich.....	1	.....	Cumberland.....	1	1
New Haven.....		2	Massachusetts: Arlington.....		1
District of Columbia: Washington.....		5	Belmont.....		1
Florida: Tampa.....		1	Boston.....	8	10
Georgia: Atlanta.....	3	3	Braintree.....	1	1
Savannah.....		3	Cambridge.....	1	1
Illinois: Chicago.....	51	19	Chelsea.....	1	.....
Danville.....	1	.....	Fall River.....		1
Decatur.....	2	.....	Lynn.....	1	1
Kewanee.....	1	.....	New Bedford.....		1
La Salle.....		1	Newton.....		1
Peoria.....		2	Quincy.....		2
Quincy.....	1	1	Springfield.....	1	.....
Rockford.....		1	Webster.....	1	.....
Springfield.....	3	3	Worcester.....		1

CITY REPORTS FOR WEEK ENDED AUGUST 5, 1922—Continued.

PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Michigan:			New York—Continued:		
Detroit.....	14	10	Rome.....	6	.....
Flint.....	1	.....	Syracuse.....	4	1
Kalamazoo.....	1	1	Yonkers.....	.....	1
Marquette.....	.....	1	North Carolina:		
Minnesota:			Winston-Salem.....	.....	1
Duluth.....	6	.....	Ohio:		
Minneapolis.....	5	.....	Akron.....	1	.....
St. Paul.....	7	.....	Barberton.....	1	2
Missouri:			Cincinnati.....	1	4
Independence.....	2	.....	Cleveland.....	7	3
Kansas City.....	8	4	Columbus.....	.....	2
St. Joseph.....	1	.....	East Cleveland.....	1	.....
Montana:			Norwood.....	1	1
Butte.....	2	.....	Toledo.....	.....	1
Nebraska:			Oklahoma:		
Omaha.....	5	.....	Oklahoma.....	.....	2
New Hampshire:			Oregon:		
Concord.....	1	.....	Portland.....	.....	1
Manchester.....	1	.....	Pennsylvania:		
New Jersey:			Philadelphia.....	31	20
Atlantic City.....	2	.....	Rhode Island:		
East Orange.....	2	.....	Pawtucket.....	.....	2
Harrison.....	1	.....	South Carolina:		
Hoboken.....	1	.....	Charleston.....	.....	1
Newark.....	10	4	Tennessee:		
Orange.....	4	.....	Memphis.....	.....	2
Passaic.....	1	.....	Nashville.....	.....	4
Perth Amboy.....	2	.....	Texas:		
Plainfield.....	1	1	Dallas.....	.....	1
Trenton.....	5	.....	Fort Worth.....	1	1
New York:			Houston.....	.....	3
Albany.....	2	.....	Waco.....	.....	1
Buffalo.....	3	4	Virginia:		
Cohoes.....	1	.....	Richmond.....	.....	1
Lackawanna.....	2	.....	West Virginia:		
Mount Vernon.....	2	.....	Wheeling.....	.....	1
New York.....	77	48	Wisconsin:		
Niagara Falls.....	3	1	Milwaukee.....	1	.....
Olean.....	.....	1	Racine.....	.....	1
Rochester.....	3	1	Superior.....	.....	1

POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre- vious. years.	Week ended Aug. 5, 1922.		City.	Median for pre- vious years.	Week ended Aug. 5, 1922.	
		Cases.	Deaths.			Cases.	Deaths.
Arkansas:				New York—Continued.			
Fort Smith.....	.....	1	.....	New York.....	7	4	3
California:				Peekskill.....	0	1	.....
Oakland.....	0	1	.....	Rome.....	0	1	1
San Francisco.....	0	1	.....	Ohio:			
Massachusetts:				Dayton.....	0	1	.....
Attleboro.....	0	1	.....	Pennsylvania:			
Boston.....	0	2	1	Allentown.....	0	2	.....
Brookline.....	0	1	.....	Erie.....	0	1	.....
Medford.....	0	1	.....	Philadelphia.....	0	1	.....
New Bedford.....	0	.....	1	Scranton.....	0	2	.....
Northampton.....	0	1	.....	Rhode Island:			
Webster.....	.....	3	.....	Cumberland.....	0	1	.....
Minnesota:				Providence.....	0	10	4
Minneapolis.....	0	1	.....	South Carolina:			
New Jersey:				Charleston.....	0	1	.....
Bloomfield.....	0	1	1	Vermont:			
Elizabeth.....	0	5	.....	Rutland.....	0	2	.....
Plainfield.....	0	1	.....	Virginia:			
New Mexico:				Norfolk.....	0	1	.....
Albuquerque.....	.....	1	.....	Richmond.....	0	1	.....
New York:				Wisconsin:			
Auburn.....	0	2	1	Madison.....	0	1	.....
Buffalo.....	0	1	.....	Milwaukee.....	0	1	.....

August 25, 1922.

CITY REPORTS FOR WEEK ENDED AUGUST 5, 1922—Continued.

RABIES IN ANIMALS.

City.	Cases.	City.	Cases.
California:		Massachusetts:	
Los Angeles.....	8	Methuen.....	1
Pasadena.....	1	Missouri:	
Kentucky:		Kansas City.....	3
Louisville.....	1		

SCARLET FEVER.

See p. 2071; also Telegraphic weekly reports from States, p. 2062, and Monthly summaries by States, p. 2065.

SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre- vious years.	Week ended Aug. 5, 1922.		City.	Median for pre- vious years.	Week ended Aug. 5, 1922.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				North Dakota:			
Mobile.....	0		1	Grand Forks.....	0	1	.....
California:				Ohio:			
Long Beach.....	0	3	1	Springfield.....	0	1	.....
Los Angeles.....	0	2	.....	Oklahoma:			
Oakland.....	0	1	.....	Oklahoma.....	1	1	.....
Riverside.....	0	1	.....	Oregon:			
Colorado:				Portland.....	2	7	.....
Denver.....	6	7	.....	Tennessee:			
Indiana:				Nashville.....	0	1	.....
Frankfort.....	0	1	.....	Washington:			
Iowa:				Everett.....	0	1	.....
Cedar Rapids.....	0	1	.....	Seattle.....	5	1	.....
Kansas:				Wisconsin:			
Hutchinson.....	0	1	.....	Milwaukee.....	2	1	.....
Michigan:				Superior.....	1	8	.....
Kalamazoo.....	0	1	.....			
Minnesota:							
Duluth.....	0	3	.....			
Minneapolis.....	3	2	.....			

TETANUS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama:			Maine:		
Birmingham.....	1	1	Bangor.....	1	.....
California:			Maryland:		
San Bernardino.....	1	.....	Baltimore.....	.....	1
Connecticut:			Massachusetts:		
Hartford.....	1	.....	Beverly.....	.....	1
Florida:			Haverhill.....	1	.....
Tampa.....	1	.....	Nebraska:		
Illinois:			Lincoln.....	.....	1
Chicago.....	4	.....	Oregon:		
			Portland.....	.....	1

CITY REPORTS FOR WEEK ENDED AUGUST 5, 1922—Continued.

TUBERCULOSIS.

See p. 2071; also Telegraphic weekly reports from States, p. 2062.

TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that of the number of years for which information is available.

City.	Median for pre- vious years.	Week ended Aug. 5, 1922.		City.	Median for pre- vious years.	Week ended Aug. 5, 1922.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Minnesota:			
Annniston	0	1	.....	Minneapolis	2	2	2
Birmingham	14	9	1	St. Paul	0	2	.....
Montgomery	0	1	1	Kansas City	3	6	1
Arkansas:				St. Joseph	1	1	.....
Fort Smith	1	4	.....	St. Louis	11	8	1
Hot Springs	0	1	.....	Montana:			
California:				Great Falls	1	1	.....
Los Angeles	3	4	1	New Jersey:			
Oakland	1	.....	1	Asbury Park	0	1	.....
Sacramento	1	1	.....	Newark	1	1	.....
San Francisco	5	1	.....	Perth Amboy	0	1	.....
Santa Barbara	0	1	.....	Plainfield	0	1	.....
Colorado:				Trenton	1	4	1
Denver	2	3	.....	New York:			
Pueblo	0	2	.....	Albany	0	3	.....
Connecticut:				Elmira	0	2	.....
Hartford	2	4	.....	Ithaca	1	1	.....
New Haven	2	5	.....	New York	28	20	4
Stonington	1	.....	.....	Rochester	2	1	1
District of Columbia:				Rome	0	1	.....
Washington	13	8	1	Syracuse	0	2	.....
Florida:				Troy	0	1	.....
Tampa	1	.....	.....	North Carolina:			
Georgia:				Durham	2	3	.....
Atlanta	3	1	2	Raleigh	0	7	1
Macon	2	2	.....	Winston-Salem	2	1	1
Savannah	3	2	.....	Ohio:			
Illinois:				Bucyrus	1	2	.....
Alton	1	1	.....	Canton	1	1	.....
Chicago	6	1	.....	Cincinnati	3	3	.....
Decatur	0	1	.....	Cleveland	5	5	1
Kewanee	0	1	.....	Newark	0	1	.....
Quincy	0	1	.....	Springfield	0	1	.....
Indiana:				Oklahoma:			
Muncie	1	2	.....	Oklahoma	2	3	.....
Kansas:				Tulsa	16	1	.....
Coffeyville	1	1	.....	Oregon:			
Kansas City	1	2	.....	Portland	0	1	.....
Wichita	4	2	.....	Pennsylvania:			
Kentucky:				Allentown	1	2	.....
Louisville	4	9	.....	Altoona	0	1	.....
Paducah	1	2	.....	Canonsburg	7	1	.....
Louisiana:				Chester	0	1	.....
New Orleans	7	4	3	Erie	1	1	.....
Maine:				Norristown	0	2	.....
Lawson	0	1	.....	Philadelphia	13	10	1
Maryland:				Pittsburgh	5	9	.....
Baltimore	12	7	.....	Pottstown	0	3	.....
Massachusetts:				Reading	1	1	.....
Boston	3	2	2	Swissvale	0	2	.....
Brockton	0	1	.....	Washington	0	3	.....
Fall River	4	2	.....	Wilkinsburg	0	1	.....
Gardner	0	1	.....	York	0	1	.....
Lowell	0	1	.....	Rhode Island:			
Lynn	0	1	.....	Providence	1	2	.....
Melrose	0	1	.....	South Carolina:			
Natick	0	1	.....	Charleston	5	2	1
New Bedford	1	1	.....	Columbia	1	1	.....
Somerville	0	1	1	Greenville	0	1	.....
Waltham	0	1	.....	Tennessee:			
Michigan:				Chattanooga	10	1	.....
Detroit	12	9	2	Knoxville	7	1	1
Flint	2	1	.....	Memphis	2	5	.....
Holland	0	1	.....	Nashville	10	5	.....

CITY REPORTS FOR WEEK ENDED AUGUST 5, 1922—Continued.

TYPHOID FEVER—Continued.

City.	Median for pre- vious years.	Week ended Aug. 5, 1922.		City.	Median for pre- vious years:	Week ended Aug. 5, 1922.	
		Cases.	Deaths.			Cases.	Deaths.
Texas:							
Dallas.....	5	3	.....	Washington:		0	2
El Paso.....	0	1	1	Felington.....		1	3
Fort Worth.....	1	1	.....	Seattle.....		0	1
Virginia:							
Alexandria.....	1	1	.....	West Virginia:		0	1
Lynchburg.....	3	1	.....	Bluemfield.....		0	1
Norfolk.....	4	1	1	Clarksburg.....		0	1
Petersburg.....	0	1	.....	Huntington.....		2	1
Richmond.....	1	1	.....	Martinsburg.....		2	2
				Morgantown.....		0	1

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:										
Anniston.....	17,734	6							2	
Birmingham.....	178,806	49	4						5	
Mobile.....	60,777	20	3						1	
Montgomery.....	43,464	8	1						1	
Tuscaloosa.....	11,998	1								
Arkansas:										
Fort Smith.....	28,870	4						1	2	
Hot Springs.....	11,695	3	1						1	
Little Rock.....	65,142								1	
North Little Rock.....	14,048	1								
California:										
Alameda.....	28,806	4	1							
Glendale.....	13,536	8								1
Long Beach.....	55,593	18							2	
Los Angeles.....	576,673	159	37		1		9		31	21
Oakland.....	216,261	37	9				2		2	
Pasadena.....	45,354	9	1	1					1	1
Richmond.....	16,543	1	1							
Riverside.....	19,341	2				1		1	1	
Sacramento.....	65,908	17	1					1	1	4
San Bernardino.....	18,721	9	1							
San Diego.....	74,683	27	2	1					4	3
San Francisco.....	506,676	113	14	2			4		27	10
Santa Ana.....	15,485	4								
Santa Barbara.....	19,441	7								
Santa Cruz.....	10,917	5								
Vallejo.....	21,107	4								
Colorado:										
Denver.....	256,491	72	18	1	2		4		9	10
Pueblo.....	43,050	7	2							
Trinidad.....	10,906		3	1						
Connecticut:										
Bridgeport.....	143,555	26	3		5		4		2	1
Bristol.....	20,620	2								
Derby.....	11,238	2								
Fairfield.....	11,475		1		1					
Greenwich.....	22,123	1			1					
Hartford.....	138,036	33	1							
Manchester.....	18,370	0								
Milford.....	10,193	4								
New Britain.....	59,316	9	1		1					
New Haven.....	162,537	25	2		17		1		13	1
New London.....	25,688	4								
Norwalk.....	27,743	12								
Stonington.....	10,236	1			2					
Waterbury.....	91,715	13					1		3	1

CITY REPORTS FOR WEEK ENDED AUGUST 5, 1922—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Delaware:										
Wilmington.....	110,168	17								
District of Columbia:										
Washington.....	47,571	98	8	1	4	—	6	—	23	12
Florida:										
Tampa.....	51,608	13								4
Georgia:										
Atlanta.....	200,616	62	3	2			1	—	1	4
Macon.....	52,995	—	1	—						
Rome.....	13,252	—	3	—						
Savannah.....	43,252	18							1	1
Idaho:										
Boise.....	21,393	4	2	—						
Pocatello.....	15,001	2								
Illinois:										
Alton.....	24,682	4								
Aurora.....	36,397	6	5	—						3
Bloomington.....	28,725	8								2
Blue Island.....	11,424	3								
Chicago.....	2,701,705	456	74	3	80	4	15	1	152	19
Cicero.....	44,995	—	3	—	1	—				
Danville.....	33,776	6								2
Decatur.....	43,818	5	1	—						1
Elgin.....	27,454	2								
Evanston.....	37,234	5			5	—				3
Freeport.....	19,669	4	1	—						
Galesburg.....	23,834	7								
Kewanee.....	16,026	3								
La Salle.....	13,050	3	1	—			2	—		
Mattoon.....	13,552	3								
Peoria.....	76,121	17	1	—	1	—				1
Quincy.....	35,978	10								
Rockford.....	65,651	13			8	—			3	2
Springfield.....	59,183	24	2	—			1	—	2	—
Indiana:										
Anderson.....	29,767	1					1	—		
Bloomington.....	11,595	4								
Crawfordsville.....	10,139	2								
East Chicago.....	35,967	5								
Fort Wayne.....	86,549	18								
Frankfort.....	11,585	0								
Hammond.....	36,004	6					1	—		
Indianapolis.....	314,194	69	4	1	8	—	1	4	5	
Kokomo.....	30,067	3			1	—				1
La Fayette.....	22,486	1								
Logansport.....	21,626	2								
Mishawaka.....	15,195	4	1	—	1	—	1	—	1	
Muncie.....	36,524	10	1	1	6	—	1	—	4	
South Bend.....	70,983	9								
Terre Haute.....	66,083	24								
Iowa:										
Burlington.....	24,057	6	1	1						
Council Bluffs.....	36,162	5	4	—						
Dubuque.....	39,141	—			1	—	1	—		
Marshalltown.....	15,731	—	1	—			1	—		
Muscatine.....	16,068	4								
Ottumwa.....	23,003	—	1	—			2	—		
Waterloo.....	36,230	—								
Kansas:										
Atchison.....	12,630	—	2	—						
Coffeyville.....	13,452	2								
Fort Scott.....	10,603	3	4	—						
Kansas City.....	101,177	—	2	—	1	—	3	—	5	
Lawrence.....	12,456	—	1	—					1	
Leavenworth.....	16,912	—	1	—						
Parsons.....	16,028	3					1	—	1	
Salina.....	15,085	6	1	—						
Topeka.....	50,022	7	3	—			1	—	3	
Wichita.....	72,217	38	1	—			2	—	1	

August 25, 1922.

CITY REPORTS FOR WEEK ENDED AUGUST 5, 1922—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population Jan. 1, 1920,	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Kentucky:										
Lexington.....	41,534	14							6	2
Louisville.....	234,891	45	7						18	2
Paducah.....	24,735	6								
Louisiana:										
New Orleans.....	387,219	137	4	1			3		37	14
Maine:										
Auburn.....	16,985	3								
Bangor.....	25,978	2								
Bath.....	14,731								1	
Biddeford.....	18,008	2	3							
Lewiston.....	31,791	8					4		1	
Portland.....	69,272	17	4				2			
Sanford.....	10,691	0								
Maryland:										
Baltimore.....	733,826	204	10	1	19	1	3		29	20
Cumberland.....	26,837	8								1
Massachusetts:										
Amesbury.....	10,036	3					1			
Arlington.....	18,655	4					1			
Attleboro.....	19,731	11								1
Belmont.....	10,749	3								
Beverly.....	22,561	4							1	
Boston.....	745,060	169	45		40	2	8	1	22	13
Braintree.....	10,580	3			2				1	2
Brockton.....	66,254	14	7		3		2		2	1
Brookline.....	37,748	8	1		1					
Cambridge.....	109,694	21	1		3		1		5	4
Chelsea.....	43,184	10	1		1		2		3	1
Chicopee.....	36,214	7	1							
Clinton.....	12,979	2							1	
Dedham.....	10,792	2								
Easthampton.....	11,261								1	
Everett.....	40,120	2								
Fall River.....	120,485	30			8		2		5	2
Fitchburg.....	41,029	7	4				1			
Framingham.....	17,033	2			1				1	
Gardner.....	16,971	2							1	1
Greenfield.....	15,462	3	1							
Haverhill.....	53,884	11	1							2
Leominster.....	19,744	2								
Lowell.....	112,759	20	1							
Lynn.....	99,148	20	3	1	3		2		3	4
Malden.....	49,103	12	2		2		3	1	3	
Medford.....	39,038	6			4		1			
Melrose.....	18,204	2			1					
Methuen.....	15,189	6			1					
New Bedford.....	121,217	29	1				3		2	2
Newburyport.....	15,618	4			2					
Newton.....	46,054	7	2		3		1		2	1
North Adams.....	22,232	4								
Northampton.....	21,051	6			4		1			
Pittsfield.....	41,763	11					1		2	
Plymouth.....	13,045	4								
Quincy.....	47,876	7	4		1				1	
Salem.....	42,529	6			1				1	1
Saugus.....	10,874	2								
Somerville.....	63,091	20	2				1		4	
Southbridge.....	14,245	4								
Springfield.....	129,614	23	2		1		2		2	1
Taunton.....	37,137	4								
Wakefield.....	13,025	2								
Waltham.....	30,915	6	1						2	2
Watertown.....	21,457	2	2							
Webster.....	13,258	1			1					
West Springfield.....	13,443	3								
Westfield.....	18,604	4	2						2	1
Winthrop.....	15,455	2							1	
Woburn.....	16,574	1								
Worcester.....	179,754	39	4				1		2	2

CITY REPORTS FOR WEEK ENDED AUGUST 5, 1922—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Michigan:										
Alpena.	11,101		2							
Ann Arbor.	19,516	10								
Benton Harbor.	12,233	4								
Detroit.	903,678	180	33	2	10	5	19	2	27	23
Flint.	91,599	14								
Hamtramck.	48,615	0	5							
Highland Park.	46,499	6								
Holland.	12,183	0	1				3			
Jackson.	48,374	9			1					
Kalamazoo.	48,487	15	3		1				1	1
Marquette.	12,718	4								
Pontiac.	34,273	1							1	
Saginaw.	61,903	5	1		3		3		1	
Sault Ste. Marie.	12,096	1								
Minnesota:										
Duluth.	98,917	13			2		1		7	1
Hibbing.	15,089	3	1				3			
Mankato.	12,469								1	
Minneapolis.	380,582	69	8	3	4		10			
Rochester.	13,722	21					2			
St. Cloud.	15,573						2			
St. Paul.	234,698	56	14		5		2		16	6
Winona.	19,143	6	1							
Missouri:										
Cape Girardeau.	10,252	1	1		2	1				
Independence.	11,686	6								
Kansas City.	324,410	104	2		2		1		8	7
St. Joseph.	77,939	23	1		3				2	2
St. Louis.	772,897	145	15	1	3		1		31	8
Springfield.	39,631	11								2
Montana:										
Butte.	41,611	8							4	1
Great Falls.	24,121	6	2							
Missoula.	12,608	5							1	
Nebraska:										
Lincoln.	54,948	10	1				1			
Omaha.	191,601	45	1		1		2			2
Nevada:										
Reno.	12,016	4								
New Hampshire:										
Concord.	22,167	11	1		2		1			
Dover.	13,029	2								
Keene.	11,210	2			1					
Manchester.	28,384	12		1						
Nashua.	28,379	13			1					
New Jersey:										
Ashbury Park.	12,400	2								
Atlantic City.	50,707	16	1		2		1		1	
Bayonne.	76,754		1		1		1		2	
Bloomfield.	22,019	1			2				1	
Clifton.	26,470	1								
East Orange.	50,710	5			2				3	
Elizabeth.	95,783		20	2	4		2		4	
Garfield.	19,381		1		1		1			
Harrison.	15,721								1	
Hoboken.	68,166	9	3						1	
Kearny.	26,724	3								
Montclair.	28,810	5			2		4	1	1	1
Newark.	414,524	82	4	2	21		2		14	2
Orange.	33,268	4	2		3					
Passaic.	63,841	13	2		5		1			
Paterson.	135,875		4		6		3		5	
Perth Amboy.	41,707	7	4		1		1		2	
Phillipsburg.	16,923	2	1							
Plainfield.	27,700	5			1		1			
Rahway.	11,042	0								
Summit.	10,174	4								
Trenton.	119,289	35	6		2	2			7	2
West Hoboken.	40,074	5	1	1					1	
West New York.	29,926	1							1	
West Orange.	15,573	2	1	1	1		1			

August 25, 1922.

CITY REPORTS FOR WEEK ENDED AUGUST, 5 1922—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New Mexico:										
Albuquerque.....	15,157	7	3							2
New York:										
Albany.....	113,344	3		1		2		1		
Auburn.....	36,192	12							2	1
Buffalo.....	506,775	99	14	1	4		5	1	27	8
Cohoes.....	22,987	6	1						1	1
Elmira.....	45,393		1							
Glens Falls.....	16,638	4								
Hornell.....	15,025	6								
Hudson.....	11,745	4	2							
Ithaca.....	17,004	6								
Jamestown.....	38,917	6			1		1			
Lackawanna.....	17,918	1					4		1	
Little Falls.....	13,029	1								
Lockport.....	21,308	3	1							
Middletown.....	18,420									1
Mount Vernon.....	42,726	3							2	
New York.....	5,620,048	1,068	105	8	64	6	25		224	103
Newburgh.....	30,366	5							1	
Niagara Falls.....	50,760	15	1		2		1		1	
North Tonawanda.....	15,482	0								
Olean.....	20,506	5					1		3	
Peekskill.....	15,868	1	1		1					1
Rochester.....	295,750	58	2	1	10		2		9	8
Rome.....	26,341	13					1			
Saratoga Springs.....	13,181	8	1							
Schenectady.....	88,723	21		1			5		3	1
Syracuse.....	171,717	31	10	1	1		5	1	6	1
Troy.....	72,013	16	1							2
Watertown.....	31,285	6	1							
White Plains.....	21,031	3								
Yonkers.....	100,176	25	3		2		1			
North Carolina:										
Durham.....	21,719	5	2						2	1
Raleigh.....	24,418	9								
Wilmington.....	33,372	6		1						
Winston-Salem.....	48,395	16					1		4	3
Ohio:										
Akron.....	208,435	28	2		2		3			
Ashtabula.....	22,082	4								
Barberton.....	18,811	5								1
Bucyrus.....	10,425	0								
Canton.....	87,091	13	1		1				1	
Cincinnati.....	401,247	100	1	1	1		1		16	13
Cleveland.....	796,841	130	20	1	29		20	1	44	17
Columbus.....	237,031	55	3		2		1		2	3
Dayton.....	152,559	32	2				1			
East Cleveland.....	27,292	1							4	
Findlay.....	17,021	2								
Fremont.....	12,468	1							1	
Lancaster.....	14,706	5								
Lima.....	41,326	13	1		1					2
Lorain.....	37,295		1		1					
Mansfield.....	27,824	3	1							
Marion.....	27,801		2				1			
Martins Ferry.....	11,634	3								
Middletown.....	23,594	2								
Newark.....	26,718	9								
Niles.....	13,080	0	1							
Norwood.....	24,966	1								
Piqua.....	15,044	8	1							
Salem.....	10,305	2				4				
Sandusky.....	22,897	2			1				1	
Springfield.....	60,840	7		1						2
Steubenville.....	28,508	6	2							
Toledo.....	243,164	46	7	1	17	2	2		6	6
Youngstown.....	132,358	21	4						2	3
Zanesville.....	29,569	7	3						3	
Oklahoma:										
Oklahoma.....	91,295	23	2	1			1		1	
Tulsa.....	72,075						3			

CITY REPORTS FOR WEEK ENDED AUGUST 5, 1922—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Popula-tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber-culosi-	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Oregon:										
Portland.	258,288	50	6						2	3
Pennsylvania:										
Allentown.	73,502		3							3
Altoona.	60,331									
Beaver Falls.	12,802		1							
Berwick.	12,181									
Bethlehem.	50,358		2							
Braddock.	20,879									
Bristol.	10,273		1							
Canonsburg.	10,632									
Carbondale.	18,640									
Chester.	58,090		1							
Coatesville.	14,515									
Duquesne.	19,011		1							
Easton.	33,813		1							
Erie.	93,372									
Harrisburg.	75,917		2							
Hazeltown.	32,277		1							
Homestead.	20,452									
Jeanette.	10,627									
Johnstown.	67,327		1							
Lancaster.	53,150		3							
McKeesport.	46,781									
McKees Rocks.	16,713		21							
Mahanoy City.	15,599									
New Castle.	44,938		2							
Norristown.	32,319									
North Braddock.	14,928									
Philadelphia.	1,823,779	350	20	2	115	2	18	2	89	34
Pittsburgh.	588,343		13		59		4		16	
Pottsville.	21,876		7							
Punxsutawney.	10,311									
Reading.	107,784		3							
Scranton.	137,783		3		4		3		6	
Shamokin.	21,204		1							
Sharon.	21,747									
Shenandoah.	24,726		3		1					
Steelton.	13,428									
Sunbury.	13,721		1							
Swissvale.	10,908									
Uniontown.	15,692		2							
Washington.	21,480		1							
Wilkes-Barre.	73,833		4							
Wilkinsburg.	24,403		1							
York.	47,512									
Rhode Island:										
Cranston.	22,407	4								
Cumberland.	10,077	3								
Newport.	30,255	4	1							
Pawtucket.	64,248	15								
Providence.	237,595	73	1	2	5		1			11
South Carolina:										
Charleston.	67,967	40	1							
Columbia.	37,524		1							
Greenville.	23,127	3	1							2
Tennessee:										
Chattanooga.	57,895		1							
Knoxville.	77,818		1		1					
Memphis.	162,351	58	4	1	3		2		8	3
Nashville.	118,342	41	1						7	5
Texas:										
Beaumont.	40,422	8								1
Corpus Christi.	10,522	3								
Dallas.	158,976	48	6		2		1		4	1
El Paso.	77,560	23			2					5
Fort Worth.	106,482	25	2						1	1
Galveston.	44,255	12								
Houston.	138,276	30								3
San Angelo.	10,060	8								3
Waco.	38,500	8						1		

August 25, 1922.

CITY REPORTS FOR WEEK ENDED AUGUST 5, 1922—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

FOREIGN AND INSULAR.

PLAQUE ON VESSEL.

Greek Vessel—At Messina, Italy.

Under date of July 19, 1922, cases of plague were reported on a Greek vessel arrived at Messina, Italy. The vessel was not allowed to enter.

CHINA.

Cholera—Shanghai.¹

During the month of July, 1922, 197 cases of cholera were reported in Shanghai. Under date of August 10, 1922, 11 deaths from cholera were reported as occurring within the week.

Plague—Foochow.

Under date of June 21, 1922, plague was stated to be mildly epidemic at Foochow, China, with two fatal cases occurring in the foreign population in the persons of physicians engaged in treating plague cases.

Proposed Quarantine Against Hongkong.

In view of the declared plague epidemic present at Hongkong, China, the consular body at Foochow on May 13, 1922, communicated to the Chinese officials their decision that Hongkong should be declared an infected port. To June 21, 1922, no action had been taken by the local government.

CUBA.

Quarantine Against Mexican Ports on Account of Yellow Fever.

According to information dated August 5, 1922, quarantine on account of yellow fever has been ordered to be enforced at ports in Cuba against arrivals from all Mexican ports.

EGYPT.

Plague—Increased Prevalence—Port Said.

According to information received under date of July 17, 1922, the seasonal prevalence of plague at Port Said, Egypt, is more marked for the current year than it has been for several previous years. During the two weeks ended July 15, 1922, 10 new cases of plague were re-

¹ Public Health Reports, Aug. 11, 1922, p. 1972.

August 23, 1922.

ported admitted to hospital and 11 deaths from plague were reported as occurring in and outside of hospital. Rat trapping was stated to be carried on in the vicinity of the premises on which the cases occurred. (Population of Port Said, approximately 100,000.)

JAMAICA.

Alastrim.

During the period June 18 to July 29, 1922, 93 new cases of alastrim were reported in the Island of Jamaica. The greatest number of cases reported for any week during this period was 28, occurring during the week ended July 15, 1922. The lowest number of cases reported was for the week ended July 29, viz, 3 cases.

Typhoid Fever—Kingston and Vicinity.

During the same period 22 cases of typhoid fever were reported in Kingston, and 99 cases were notified in the vicinity of Kingston.

MEXICO.

Measures for Mosquito Destruction—Ciudad Juarez.

According to official information received under date of July 25, 1922, construction of dikes and drains along the Mexican side of the Rio Grande for the elimination of mosquitoes was about to be begun at Ciudad Juarez, Mexico.

POLAND.

Cholera—Rovno.

Referring to the reported appearance of cholera at Rovno, Poland, June 18, 1922,¹ later information received under date of August 8 shows the occurrence of five cases of cholera with two deaths at Rovno during the week ended June 16, 1922, and three cases with one death during the week ended July 17, 1922. Rovno (or Rowno) is stated to be a repatriation station. The cases occurred in persons repatriated from Russia.

RUSSIA.

Smallpox—Typhus Fever—Lettonia.

During the month of May, 1922, 30 cases of smallpox and 249 cases of typhus fever were reported in the Province of Lettonia, Russia. During the same period there were reported 12 cases of recurrent typhus. (Population, census of December 31, 1920, 1,727,500; officially estimated, 1922, 1,850,000.)

¹ Public Health Reports, July 21, 1922, p. 1819.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.**Reports Received During Week Ended August 25, 1922.¹**

The reports contained in the following tables must not be considered as complete or final, either as regards the list of countries included or the figures for the particular countries for which reports are given.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Shanghai.....	Aug. 4-10.....		11	July 1-31, 1922: Cases, 197.
Philippine Islands:				
Manila.....	June 25-July 1.....	1		
Province—				
Nueva Ecija.....	June 11-17.....	1	1	
Pampanga.....	do.....	1	1	
Poland:				
Rovno.....	June 10-16.....	5	2	Repatriation station. Cases: In persons repatriated from Russia.
Do.....	July 11-17.....	3	1	
Syria:				
Aleppo.....	July 16-22.....			Present in interior.

PLAQUE.

Asia Minor:				
Smyrna.....	June 30-July 1.....	1		
British East Africa:				
Kenya Colony.....				Mar. 1-31, 1922: Cases, 23; deaths, 23.
Ceylon:				
Colombo.....	June 18-24.....	2	2	Plague rats, 5.
Do.....	June 25-July 1.....		1	
China:				
Foochow.....	June 21.....			Mildly epidemic. Two fatal cases in foreign physicians.
Egypt:				
City—				
Alexandria.....	July 14.....	1		
Port Said.....	July 18-19.....	4	2	Jan. 1-July 20, 1922: Cases, 380; deaths, 189. Increased seasonal prevalence reported July 17, 1922.
Province—				
Benisouef.....	July 14-20.....	8	5	
Fayoum.....	July 18-20.....	3		
Menoufieh.....	July 20.....	1	1	
Minieh.....	July 14-18.....	9	5	
India—				
Bombay.....	June 4-10.....	7	7	
Karachi.....	July 2-8.....	2	2	
Madras Presidency.....	do.....	25	17	
Madagascar:				
Tananarive.....	May 29-June 4.....	1		
Mesopotamia:				
Bagdad.....	May 1-31.....	90	70	
Palestine:				
Jerusalem.....	July 11-17.....	6		
Senegal:				
Dakar.....	June 1-30.....	1	1	
On vessel:				
Greek vessel —	July 10.....			At Messina, Italy. Cases on board. Vessel not allowed to enter.

SMALLPOX.

Arabia:				
Aden.....	July 9-15.....	14	3	
Argentina:				
Rosario.....	June 1-30.....		3	
Asia Minor:				
Smyrna.....	June 25-July 1.....	1		
Brazil:				
Para.....	July 17-23.....	14		
	May 29-June 11.....	1	8	

¹ From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended August 25, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
British East Africa:			*	
Kenya Colony:				
Dar es Salaam.....	May 14-20.....	3		
Nairobi.....				Mar. 1-31, 1922: Cases, 22; deaths, 2.
Canada:				
Ontario—				
Hamilton.....	Aug. 6-12.....	1		
Ottawa.....	July 30-Aug. 5.....	1		
Chile:				
Concepcion.....	June 6-20.....		9	
China:				
Manchuria—				
Dairen.....	June 12-18.....	2		
Mukden.....	June 18-24.....			Present.
Dominican Republic:				
San Pedro de Macoris.....	July 16-22.....	32	1	Including vicinity.
Santo Domingo.....	July 23-29.....	1		
Egypt:				
Cairo.....	Apr. 30-May 6.....	4	2	
Greece:				
Saloniki.....	June 19-25.....		1	
India:				
Bombay.....	June 4-10.....	3	2	Apr. 30-May 20, 1922: Deaths, 2,515.
Madras.....	July 2-8.....	57	31	
Japan:				
Yokohama.....	June 26-July 2.....	3		
Java:				
West Java—				
Batavia.....	June 24-30.....	10	1	Province.
Mesopotamia:				
Bagdad.....	May 1-31.....	9	6	
Mexico:				
Nogales.....	July 30-Aug. 5.....		1	
Panama:				
Colon.....	July 16-31.....	1		
Portugal:				
Lisbon.....	July 2-15.....	10	5	
Russia:				
Lettonia.....	May 1-31.....	30		
Senegal:				
Dakar.....	June 1-30.....	4	4	
Spain:				
Seville.....	July 16-30.....		15	
Switzerland:				
Berne.....	July 9-15.....	1		
Syria:				
Damascus.....	June 25-July 1.....	5	1	
Tunis:				
Tunis.....	July 17-23.....	1		
Turkey:				
Constantinople.....	July 9-15.....	2		

TYPHUS FEVER.

Asia Minor:				
Smyrna.....	June 25-July 1.....	3		District.
Austria:				
Vienna.....	July 2-8.....	1	1	
Egypt:				
Alexandria.....	do.....	1		
Cairo.....	Apr. 30-May 6.....	4	3	
Germany:				
Coblenz.....	July 23-29.....	2		
Greece:				
Saloniki.....	June 12-18.....	2		
Mesopotamia:				
Bagdad.....	May 1-31.....	5	1	
Russia:				
Lettonia.....	do.....	249		Recurrent typhus, 12 cases.
Turkey:				
Constantinople.....	June 18-24.....	4		
Do.....	July 9-15.....	2	1	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

 Reports Received from July 1 to August 18, 1922.¹
CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Amoy.....	May 14-June 24.....	1	4	
Shanghai.....	June 25-July 1.....	1		Foreign; originally reported July 5. Aug. 2: Reported prevalent.
Tientsin.....	July 25.....	2	2	Foreign concession.
Greece:				
Athens.....	June 29.....	1	1	
Saloniki.....	June 7-17.....	30	11	
India.....				
Bombay.....	Apr. 23-June 3.....	3	3	
Calcutta.....	Apr. 23-June 24.....	536	378	
Do.....	June 25-July 1.....	10	10	
Madras.....	May 21-June 17.....	3	1	
Rangoon.....	May 7-June 24.....	116	65	
Philippine Islands:				
Manila.....	May 21-June 24.....	8		
Province—				
Batangas.....	May 28-June 3.....	1	1	
Bulacan.....	Apr. 30-May 6.....	1	1	
Camarines Sur.....	Mar. 25-Apr. 1.....	1	1	
Laguna.....	Apr. 16-22.....	1		
Mindoro.....	Apr. 23-29.....	1		
Pampanga.....	Apr. 16-May 27.....	3	3	
Rizal.....	Apr. 2-May 27.....	2	1	
Tarlac.....	May 21-June 10.....	4	4	
Poland:				
Rowno.....	June 18.....			Present. Among persons repatriated from Russia.
Rumania:				
Crangasi.....				
Siam:				
Bangkok.....	Apr. 30-June 17.....	15	9	
Syria:				
Aleppo.....	May 27-June 3.....			A few cases in interior.
Do.....	June 25-July 15.....			Present in interior.

PLAQUE.

Asia Minor:				
Smyrna.....	May 28-June 17.....	3	1	
Australia:				
New South Wales—				
Sydney.....	June 1-15.....	2		Apr. 2-June 10, 1922: 19 plague-infected rats found.
Azores:				
St. Michaels Island.....	June 25-July 1.....	13	3	At Arifres and Ribeira, about 9 miles from port of Ponta Delgada.
Brazil:				
Bahia.....	May 7-June 4.....			Rodent: occurring in a section of the city. Many dead rats found.
Pernambuco.....	May 7-13.....	1		
British East Africa:				
Kenya Colony:				
Nairobi.....	Feb. 1-28.....	15	15	Apr. 1-30, 1922: Cases, 81; deaths, 72.
Ceylon:				
Colombo.....	May 6-June 17.....	11	8	
China:				
Amoy.....	May 7-June 24.....	87		May 20: From 10 to 20 deaths reported daily.
Do.....	June 25-July 1.....	26		
Canton.....	May 1-June 30.....	28	23	
Foochow.....	May 7-June 10.....	5	4	June 17-24: Present.
Do.....	June 25-July 1.....			Prevalent.
Hongkong.....	June 4-24.....	176	101	

¹ From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.
Reports Received from July 1 to August 18, 1922—Continued.
PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Ecuador:				
Guayaquil.....	June 1-15.....			Rats found infected, 16; examined, 3,400.
Do.....	July 1-15.....			Rats examined, 4,460; found infected, 4.
Egypt:				
City—				
Alexandria.....	June 1-28.....	21	6	
Do.....	July 2-11.....	5	3	
Port Said.....	June 12-23.....	2	5	
Do.....	July 2-13.....	13	12	
Suez.....	May 24-June 25.....	7	6	
Do.....	July 10.....	1	1	
Province—				
Assiout.....	May 30-June 23.....	14	8	Septicemic, 1.
Do.....	July 11.....	1	1	
Benisouef.....	May 26-June 30.....	19	7	
Do.....	July 2-13.....	13	6	
Fayoum.....	June 3-29.....	8	4	
Do.....	July 2-10.....	10	3	
Gharbieh.....	May 26-June 30.....	37	13	
Do.....	July 2.....	3		
Minieh.....	June 2-29.....	24	7	
Greece:				
Patras.....	Apr. 24-May 14.....		3	
Hawaii:				
Hamakua.....	June 30-July 4.....	1	1	At Kalopa Homesteads. Case Hawaiian.
Do.....	July 8.....			Hamakua Mill Co. One plague rat trapped; found positive, July 14, 1922.
Kalopa.....	July 13.....	1	1	Contact with case at Kalopa Homesteads, July 4.
Paauhau.....	June 30.....			One plague rat trapped at Paauhau Gulch, June 29; found positive, June 30, 1922.
Pasuilo.....	July 7.....		1	At Pokahoa. Japanese.
India:				Apr. 23-June 17, 1922: Cases, 6,075; deaths, 4,642.
Bombay.....	Apr. 23-June 3.....	150	108	
Calcutta.....	Apr. 23-June 24.....	55	54	
Do.....	June 25-July 1.....	3	3	
Karachi.....	May 23-June 24.....	50	55	
Do.....	June 25-July 1.....	1	1	
Madras Presidency.....	May 21-June 24.....	74	36	
Do.....	June 25-July 1.....	21	8	
Rangoon.....	May 6-June 21.....	175	161	
Indo-China:				
Saigon.....	Apr. 23-June 21.....	30	21	
Japan:				
Osaka.....	July 13.....	9	8	Reported as having occurred during past month.
Java:				Month of April, 1922: Report of the seven Provinces of Java: Cases, 413; deaths, 495. May 1-31, 1922: Cases, 293; deaths, 310, occurring in six Provinces.
East Java—				Epidemic.
Soerabaya.....	May 7-13.....	2	2	
Soerakarta—				
Keporen.....	May 20.....			
Madagascar:				
Tannanarie Province—				
Anketrina.....	May 4.....		1	Native village; disease stated to have been present since about Apr. 27, 1922. Name of locality corrected.
Mesopotamia:				
Bagdad.....	Apr. 1-30.....	68	40	
Mexico:				
Vera Cruz.....	June 30.....			One plague-infected rat.
Palestine:				
Jerusalem.....	July 4-10.....	14	2	In native quarter.
Peru.....				May 1-15, 1922: Cases, 36; deaths, 19. June 1-30, 1922: Cases, 87; deaths, 15.
Philippine Islands:				
Manila.....	June 3.....	1	1	From S. S. Taisang from Amoy, China.

August 25, 1922.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.
Reports Received from July 1 to August 18, 1922—Continued.
PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Siam:				
Bangkok.....	Apr. 30-June 3....	4	3	
Straits Settlements:				
Singapore.....	Apr. 30-June 24....	8	9	
Tunis:				
Tunis.....	June 30-July 9....	3		
Union of South Africa:				
Orange Free State:				
Grootkom Farm.....	May 7-13.....			One dead plague-infected rodent found. Locality adjoins Trucart's Berg Farm, on which plague-infected mouse was found preceding week.
Rendezvous Ry. Sta-tion.	May 14-20.....			Plague-infected wild rodent found near.
On vessels:				
S. S. Ardeola.....	June 23-July 8....			At Liverpool. Four plague-infected rats found dead. Vessel from Las Palmas, Canary Islands, June 23, 1922.
S. S. Southgate.....	May 30.....	1		At Thursday Island quarantine, Australia. Vessel left Calcutta May 2; Rangoon, May 9. Vessel badly rat infested.
S. S. Taisang.....	June 1-3.....	1	1	At Manila, P. I., from Amoy, China. Patient landed at Manila June 1, 1922. The Taisang was 2½ days en route direct from Amoy.

SMALLPOX.

Arabia:				
Aden.....	May 7-June 24....	69	21	
Do.....	July 2-8....	12	5	
Asia Minor:				
Smyrna.....	May 14-June 24....	4		In district.
Bolivia:				
La Paz.....	Mar. 1-Apr. 30....	97	16	
Brazil:				
Para.....	May 29-June 25....	8		
Do.....	July 3-16....	28	1	
Rio de Janeiro.....	May 14-June 24....	48	12	
Do.....	June 25-July 15....	22	7	
Sao Paulo.....	Apr. 10-May 7....	2	2	
British East Africa:				
Kenya Colony.....	Apr. 16-June 10....	23		Apr. 1-30, 1922: Cases, 6.
Dar es Salaam.....	May 1-June 10....	36	6	
Zanzibar.....				
Canada:				
Alberta—				
Calgary.....	June 18-24....	1		
Manitoba—				
Winnipeg.....	May 6-June 17....	3		
New Brunswick—				
Kent County.....	June 25-July 1....	2		
Madawaska County.....	June 4-17....	6		
Ontario—				
Hamilton.....	July 30-Aug. 5....	1		
North Bay.....	June 3-17....	2		
Do.....	July 16-29....	2		
Ottawa.....	June 11-July 1....	17		
Do.....	July 2-29....	10		
Toronto.....	June 18-July 29....	6		
Ceylon:				
Colombo.....	May 14-20....	1		
Chile:				
Concepcion.....	Mar. 14-June 5....		62	Prevalent, July 3, 1922, throughout southern Provinces.
Do.....	June 27-July 3....		5	
Quillon.....				
Do.....	June 27-July 3....			In Concepcion Province; epidemic in May, 1922, with 60 reported cases. To June 8: Epidemic.

August 25, 1922.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.
Reports Received from July 1 to August 18, 1922—Continued.
SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Chile—Continued.				
San Patricio.....	May 16-22.....	13		
Talcahuano.....	May 22-June 24.....	33	19	
Temuco.....				May 16-22, 1922: Present. Province of Cautin; epidemic, May, 1922.
Valparaiso.....	Mar. 26-Apr. 22.....		52	Incomplete; several districts not reporting.
China:				
Amoy.....	May 7-20.....			Present June 18-21: 1 death.
Antung.....	May 29-June 18.....	4		
Do.....	July 3-9.....	1		
Chungking.....	May 28-June 24.....			Present.
Do.....	June 25-July 1.....			Do.
Foochow.....	May 14-20.....	1		
Hankow.....	June 25-July 1.....	1		
Hongkong.....	May 14-June 24.....	41	32	
Manchuria—				
Dairen.....	May 15-June 4.....	2	1	
Harbin.....	May 22-28.....	1		
Nanking.....	May 7-June 24.....			Do.
Do.....	June 25-July 1.....			Do.
Shanghai.....	May 22-28.....	1		Native.
Tientsin.....	May 14-20.....			Present.
Tsingtau.....	May 9-June 18.....	4	3	
Chosen (Korea):				
Chemulpo.....	May 1-31.....	1		
Fusan.....	do.....	118	53	
Seoul.....	do.....	15	2	
Cuba:				
Antilla.....	June 18-24.....	1		Reported for Preston.
Cienfuegos.....	June 24-July 1.....	1		
Santiago.....	June 1-30.....	3		
Dominican Republic:				
San Pedro de Macoris.....	May 21-June 24.....	167	2	City and country. Corrected re- port.
Do.....	June 25-July 15.....	104		City and district.
Santo Domingo.....	June 4-24.....	3	9	Including vicinity.
Do.....	June 25-July 22.....	1	4	Do.
Egypt:				
Port Said.....	June 11-17.....	1		
Finland.....	June 1-15.....	1		
Fiume.....	June 13-19.....	1		
Do.....	July 10-16.....	1		
France:				
Paris.....	June 1-10.....	1	1	
Great Britain:				
Sheffield.....	May 28-June 17.....	5		
Southampton.....	June 18-24.....	2		
Halifax.....				Outbreak reported under date of June 17, 1922.
Huddersfield.....				Do.
Greece:				
Saloniki.....	May 1-21.....	3		
Syra Island.....	May 26.....	12	5	
Haiti:				
Cape Haitien.....	June 11-17.....	1		Vicinity of Cape Haitien.
Plaine du Nord.....	do.....			Present.
India:				
Bombay.....	Apr. 23-June 3.....	26	12	Feb. 26-Mar. 25, 1922: Deaths, 1,162 (date of report corrected).
Calcutta.....	Apr. 23-June 24.....	84	67	Mar. 26-Apr. 29, 1922: Deaths, 3,500.
Do.....	June 25-July 1.....	4	4	
Karachi.....	May 23-June 24.....	35	9	
Madras.....	May 14-June 24.....	207	94	June 19-25: Cases, 30; deaths, 15.
Rangoon.....	May 7-June 24.....	37	16	
Japan:				
Kobe.....	June 19-25.....	2		
Taiwan Island.....	June 11-30.....	26	3	
Yokohama.....	May 29-June 25.....	4	2	
Do.....	July 1-10.....	18	3	
Java:				
West Java— Batavia.....	Apr. 28-June 23.....	10	2	City and Province.
Luxemburg.....	June 15-30.....	1	1	
Malta.....	May 1-June 15.....	4		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.
Reports Received from July 1 to August 18, 1922—Continued.
SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Mesopotamia:				
Bagdad.....	Apr. 1-30.....	3	1	
Mexico:				
Chihuahua.....	June 22-July 2.....		1	
Guadalajara.....	May 1-31.....	7		
Manzanillo.....	June 6-23.....		4	Estimated cases, 4 to 10.
Do.....	June 27-July 3.....	6	1	Estimated.
Mexico City.....	May 21-June 24.....	126		Including municipalities in Federal District. Report, June 11-17, not received.
Nogales.....	July 22-29.....	26	2	
San Luis Potosi.....	July 23-29.....		3	State of Sonora.
Peru.....				
Poland.....				
Portugal:				
Lisbon.....	May 29-June 25.....	6	8	
Do.....	June 26-July 8.....	11	10	
Russia:				
Estonia.....	May 1-31.....	4		
Spain:				
Barcelona.....	June 22-28.....		1	
Do.....	June 29-July 5.....		1	
Corunna.....	June 11-17.....		1	
Huelva.....	Apr. 1-30.....		2	
Seville.....	June 11-17.....	36		
Do.....	June 19-July 15.....		72	
Valencia.....	May 21-27.....	1		
Straits Settlements:				
Singapore.....	Apr. 30-June 5.....	11	2	
Switzerland:				
Basel.....	May 28-June 3.....	1		
Berne.....	May 14-20.....	1		
Zurich.....	Apr. 23-June 24.....	9		
Do.....	June 25-July 1.....	2		
Syria:				
Aleppo.....	June 4-24.....			
Damascus.....	June 18-24.....		2	Present.
Turkey:				
Constantinople.....	May 21-June 24.....	21	6	
Do.....	June 25-July 8.....	5	1	
Union of South Africa.....				
Cape Province.....				
Do.....	May 7-June 17.....			
* Natal.....				
Orange Free State.....				
Do.....	May 7-27.....			
Southern Rhodesia.....	May 11-June 28.....	67	4	
Transvaal.....				
Do.....	May 7-June 17.....			
Virgin Islands:				
St. Thomas.....	June 5-18.....	1	1	At quarantine. From vessel from Dominican Republic.
Yugoslavia.....				
Serbin.....				
Belgrade.....	June 11-17.....	1		
Zagreb.....	June 4-10.....	1		
On vessels:				
S. S. Changsha.....	May 11.....	1		At Hongkong, China. Case landed from vessel; patient, intending passenger. Vessel proceeded to Australian ports.
S. S. Comeric.....	do.....	1		At sea, en route to Durban, S. A., from Sydney, Australia. (Public Health Reports, June 23, 1922, p. 1555.)

August 25, 1922.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.
Reports Received from July 1 to August 18, 1922—Continued.
SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
On vessels—Continued. Schr. Fancy Me.....	May 28 .....	.....	.....	At St. Thomas, Virgin Islands. From San Pedro de Macoris, Dominican Republic. One case removed to quarantine June 5, died June 18.
S. S. Shelley.....	Apr. 19.....	1 .....	.....	At sea, en route from Hongkong. Vessel left Hongkong Apr. 17. Arrived Thursday Island quarantine, Australia, Apr. 28, 1922. Case, member of crew; type, confluent hemorrhagic.
S. S. St. Albans.....	May 18.....	1 .....	.....	At Thursday Island quarantine, Australia. Case in person of Chinese steerage passenger. Vessel left Shimonoseki, Japan, for Melbourne via Hongkong and Manila. Left Thursday Island for Australian ports.

TYPHUS FEVER.

Algeria:				
Algiers.....	May 1-31.....	16	4	
Oran.....	June 1-30.....	3	1	
Do.....	July 1-20.....	.....	2	
Asia Minor:				
Smyrna.....	May 14-June 24.....	8 .....	.....	City and district. Corrected report.
Austria:				
Vienna.....	May 7-June 10.....	3	1	
Bolivia:				
La Paz.....	Mar. 1-Apr. 30.....	15	8	
Bulgaria:				
Sofia.....	May 28-June 17.....	4 .....	.....
Chile:				
Concepcion.....	Apr. 11-May 29.....	.....	10	
Do.....	June 27-July 3.....	.....	1	
Valparaiso.....	Apr. 2-22.....	.....	6	
China:				
Antung.....	May 15-21.....	1 .....	.....
Foochow.....	May 14-20.....	1 .....	.....
Manchuria—				
Harbin.....	May 8-June 11.....	4 .....	.....
Do.....	June 26-July 2.....	3 .....	.....
Czechoslovakia:				
Prague.....	June 11-17.....	1 .....	.....
Danzig (Free City):				
June 4-10.....	.....	1 .....	.....
Egypt:				
Alexandria.....	June 4-24.....	9	6	
Do.....	June 25-July 15.....	6	2	
Cairo.....	Mar. 19-Apr. 29.....	42	28	Relapsing fever, Mar. 26-Apr. 8, 1 case.
Port Said.....	May 28-June 3.....	1 .....	.....
Do.....	July 2-8.....	1 .....	.....
Germany:				
Berlin.....	Apr. 30-May 6.....	.....	1	
Coblenz.....	July 2-22.....	2 .....	.....
Königsberg.....	May 28-June 3.....	1 .....	.....
Greece:				
Saloniki.....	May 1-28.....	23	1	
Mesopotamia:				
Bagdad.....	Apr. 1-30.....	1 .....	.....
Mexico:				
Mexico City.....	Apr. 23-June 24.....	111 .....	.....	Including municipalities in Federal District.
Palestine:				
Jerusalem.....	June 27-July 3.....	1 .....	.....
Persia:				
Teheran.....	Mar. 22-Apr. 22.....	.....	1	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.
Reports Received from July 1 to August 18, 1922—Continued.
TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Poland.....				Mar. 26-Apr. 22, 1922: Cases, 7,155. Apr. 23-June 3, 1922: Cases, 7,178; deaths, 499. Recurrent typhus—Mar. 26-Apr. 22, 1922: Cases, 4,515; deaths, 155. Apr. 23-May 6, 1922: Cases, 1,398; deaths, 34. (Corrected report.) May 7-June 3, 1922: Cases, 2, 817; deaths, 72. Among transient and permanent residents.
Warsaw.....	Apr. 23-June 24.....	156.....		
Portugal:				
Oporto.....	May 4-June 24.....	9.....	4.....	
Rumania:				Apr. 1-May 31, 1922: Cases, 62.
Cities—				
Bucharest.....	May 1-31.....	14.....		
Cerenaute.....	do.....	5.....		
Chisinau.....	Apr. 1-30.....	21.....		
Cluj.....	May 1-31.....	18.....		
Constanza.....	do.....	1.....		
Galata.....	do.....	1.....		
Suhna.....	do.....	2.....		
Provinces—				
Bucovina.....	Jan. 1-31.....	35.....	13.....	Recurrent typhus: Cases, 7.
Chisinau.....	Apr. 1-30.....	14.....		
Transylvania.....	Jan. 1-31.....	16.....	3.....	
Russia:				
Estonia.....	Apr. 1-May 31.....	31.....		
Lettonia.....	do.....	275.....		Recurrent typhus: Cases, 12.
Spain:				
Madrid.....	May 1-June 30.....		16.....	
Seville.....	May 21-June 3.....		1.....	
Tunis:				
Tunis.....	June 4-10.....	2.....		
Turkey:				
Constantinople.....	May 21-June 17.....	12.....		
Union of South Africa.....				
Cape Province.....				
Do.....	May 7-June 17.....			
Natal.....				Outbreaks.
Do.....	May 7-June 17.....			Apr. 1-May 31, 1922: Cases, 26; deaths, 4 (colored).
Orange Free State.....				Outbreaks.
Do.....	May 28-June 17.....			Apr. 1-May 31, 1922: Cases, 40; deaths, 2 (colored); white, 1 case.
Transvaal.....				Outbreaks.
Do.....	May 28-June 3.....			Apr. 1-May 31, 1922: Cases, 23; deaths, 2 (colored).
Yugoslavia:				Outbreaks.
Bosnia-Herzegovina.....	Aug. 7-13.....	1.....		Aug. 7-13, 1921: 2 new cases. (1921.)
Croatia-Slavonia.....	Sept. 4-10.....	1.....		Do.
Serbia—				
Belgrade.....	May 6-June 3.....	2.....		
Vojvodina.....	Aug. 7-13.....	• 1.....		(1921.)
From vessel:				
S. S. Smolensk.....	June 14.....	1.....	1.....	From Danzig, May 30, 1922. At embarkation detention camp, Southampton, England. Public Health Reports, June 30, 1922, p. 1610.

YELLOW FEVER.

Mexico: Tampico.....	July 27-29.....	1.....	1.....	From Panuco. Patient brought to Tampico on eighth day of illness.
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